

and the upturning of the earth for various purposes, are recognized, by the entire body of physicians attached to the French army in that country, to have given rise to the extensive development of fever. The writings of Dr. Drake, so often cited, those of Evans, Blanc, Cassan, Macculloch, Usher Parsons, Monfalcon, Caldwell, Baley, Thomas, Anderbach, and many others, abound in similar cases. Dr. Merrill, in an essay on the yellow fever of Natchez, has taken great pains to show, and with every appearance of success, that the epidemic of 1823 arose from the levelling of the streets, and the consequent exposure of the fresh soil to the action of the hot sun."

Almost every line of the above-cited passage is applicable to Charleston. The digging of canals, the opening of ditches, the levelling of lots, the filling up or digging down of streets, the opening of roads, and the upturning of the earth for various purposes, as noted by Dr. La Roche, remind one strongly of the filling up of lots with city offal, the opening of drains, the laying of gas-pipes, the filling in with dock-mud, the excavations for the new custom-house and in other places, and the upturning of the earth in numerous localities, in Charleston, during midsummer in 1849 and 1852; and the "levelling of the streets, and the consequent exposure of the fresh soil to the action of the hot sun," at Natches, in 1823, as shown by Dr. Merrill, bring vividly to recollection the extensive excavations in the summer of those same years of 1849 and 1852, when the filthy and offensive earth was thrown up to the action of the *hot sun*, the abominable material having been actually transferred from one street to fill up another.

A consideration of the causes of yellow fever brings us directly to the subject of contagion. *(To be continued.)*

ART. VI.—*Extracts from the Records of the Boston Society for Medical Improvement.* By WM. W. MORLAND, M. D., Secretary.

May 8. Dropping of Fluids from Vials; a good Method.—Dr. COALE mentioned that he had found a very simple and ready means of remedying the frequent difficulty of dropping fluids from a vial. Unless the lip projects very much, the fluid is apt to run back on the neck, and remain attached until several drops have accumulated. Greasing the neck of the vial (not the lip) will prevent this, and give a clean, uniform drop.

Encysted Tumour on the Forehead: Disappearance, after puncture of the cyst and irritation of its internal surface.—Dr. COALE had a case of common encysted melicerous tumour, on the forehead of a young lady. Unwilling to make a scar in so conspicuous a place, he passed a needle under the skin, at some little distance from the tumour, and then into the tumour itself, moving it about there and scratching its internal surface. This operation having lessened the tumour very much in size, he repeated it three weeks afterwards, and was gratified to find it in a short time entirely absorbed.

¹ Charleston Med. Journ. for May, 1853, p. 304.

Ophthalmoscope.—Dr. BETHUNE showed an ophthalmoscope, made under his direction by a son of Mr. ALVAN CLARK, of Cambridge, from a description in a recent letter from Paris, published in the *Boston Medical and Surgical Journal*.

It consists of a concave disk of glass or speculum metal, with a focus of eight inches, of about the size of a dollar, perforated by a funnel-shaped hole in the centre, as large as a goose-quill. The brass case serves for a handle. The observer, by throwing the rays of a candle into the pupil of the eye, after dilatation, gets a very good view of its internal appearance through the orifice, from behind.

Caries of Elbow-Joint.—The specimen was shown by Dr. J. MASON WARREN. The patient was a female, 19 years old, of a scrofulous habit. Two years ago, she was under medical treatment for some difficulty in the lungs. Eighteen months since, a swelling appeared near the elbow-joint, which gradually increased to a large size, when it was opened, discharging a great quantity of pus. No dead bone could be detected with the probe. The forearm remained for a time fixed in a bent position on the arm, but suddenly, four months ago, in a single night, became extended, and has hung in that position, entirely immovable and useless, since. Her general health had become much affected by this constant source of irritation and pain. At a consultation held on her case, it was at first decided not to amputate the limb, on account of the affection of the lungs, which was evidently tuberculous; but at a second examination of the case, two months subsequently, it was determined to remove the limb, *especially as the patient herself strongly urged it*. The arm above the swelling was quite small, yet a number of large vessels required ligatures, evidently going to supply the swelling below.

Since the operation, the patient has improved; and now, at the end of two weeks, is able to be up and go down stairs; her cough less, and all the functions are performed naturally.

An examination of the joint disclosed very extensive disease. The cartilages on the head of the bones were entirely destroyed. The fibro-cartilage, on which the radius revolves, had disappeared. The joint was filled with pus, and sinuses extended from it in two or three directions. All the muscles in the neighbourhood had undergone the fatty degeneration.

Blighted Fœtus and Placenta.—Suspicion of Syphilitic Taint.—Dr. PUTNAM exhibited a blighted fœtus and placenta. The mother has two children. Since their birth has had three miscarriages; one at the third month, one at the seventh, the fœtus having the development belonging to that period; and this last at the eighth month, though the vitality of the fœtus ceased at the third.

The husband stated that he contracted syphilis subsequently to the birth of the children; that he was immediately put under treatment, and, before any further conjugal intercourse, was considered free from disease. The mother had inflammation of the vagina, with muco-purulent discharge, which readily yielded to treatment. Neither has had any local or constitutional sign of disease whilst these imperfect gestations have been recurring.

Dr. Putnam supposed that, in this and similar cases, abortion might be attributed to the ordinary sympathy of the uterus with any grave disorder; but he also thought it not improbable that the specific poison, once having made its impression on the maternal system, might be operative, after all its appreciable signs had disappeared, and might affect successive products of conception.

Dr. COALE said that, from the experience of others, and from his own, he was always induced to suspect syphilitic taint in morbid alteration of the placenta, like the one just exhibited, where much, if not almost the entire bulk of the organ becomes solidified. Besides other cases, in which cause and effect were too obvious and evident to admit him to doubt for a moment the course to pursue, Dr. C. had one case which he thought an interesting one, on several points. He was called to attend a fine, healthy-looking English lady, who had already a hearty child, some three or four years old. She was anticipating, in full confidence, great pleasure from the prospective increase of her family, and when a stillborn, half-putrid child came into the world, her disappointment was proportionate. Within twelve months, the same promise was held out, to be disappointed in the same way, and this time with great effect upon the spirits and health of the mother. Dr. C.'s suspicions were now aroused as to the probable cause of the state of the placenta and death of the fœtus, and he had the trying and unpleasant duty of propounding it to the father. He confessed that, some three years before Dr. Coale's acquaintance with him, he had for a short time been irregular in his habits, had contracted disease, but was not aware of giving it to his wife. Investigation into the case of the wife gave no evidence of chancre, but decided evidence of 'secondary eruption, which had continued even to the time of examination. Dr. Coale put her at once on the deutiodide of mercury, affected the gums, very slightly, twice, and within another twelve months had the pleasure of delivering her of a fine hearty child.

In another case, however, Dr. Coale had witnessed the same change in the condition of the placenta, and the consequent death of the child, of a healthy primipara, in which no evidence could be found to awaken even a suspicion of syphilitic taint. The mother, in this case, was delivered a year afterwards, without any medical interference, of a fine healthy child.

Dr. Coale noted, in these cases, the very rapid decomposition of the child in utero. In the first, motion was perceptible until within forty-eight hours of delivery, yet the fœtus was a putrid mass. In the second and third cases, the child was evidently alive within twenty-four hours, yet the whole body was flaccid, the skull soft and shapeless, and desquamation had proceeded.

Abortion; Diseased Placenta, &c.—Dr. BLAKE remarked that he attended a woman in confinement, April 17; the child came away dead; the whole mass, placenta and unruptured membranes, passed at once. Six weeks previously, having taken exercise to an unusual degree, the patient was attacked by pain and had some flowing, which latter, however, ceased in two or three days, without any resort to remedial measures. The afterbirth was found diseased throughout one-half, or more, of its extent, being converted into a semi-cartilaginous substance. There was no reason to suspect syphilitic taint.

[In cases in which syphilis has had an influence in causing abortion, &c.—as in those related by Drs. Putnam and Coale—Dr. W. TYLER SMITH, of London, has some interesting and important remarks in the *London Lancet* for May, 1854. He concludes that "where the placenta and membranes become so diseased as to cause abortion, the child remaining free from disease, the mother is pretty sure to be affected with the disease; but when the child is born living, and is apparently healthy at the time of birth, the mother may in some cases escape contagion." "When the ovum is affected by secondary syphilitic disease, we can easily understand that the blood of the fœtus should infect the mother through the placenta." "There can be no doubt, I think, that, in practice, in all cases of repeated abortion, and eruptions in the early

months of infancy, the health of the male parent, before marriage, should be strictly inquired into."—*Op. cit.* p. 425.

At a meeting of the *Harveian Society*, Mr. BORHAM referred to Dr. Smith's paper, proving the "transmutability of secondary syphilis from the father to the child," &c. Mr. B. also exhibited two fetuses, lost at about three weeks from conception, and from the history of which, "as well as from two or three others unrecorded by him, he was induced to believe that many cases of abortion occur, and may be traced to the fœtus being vitiated, from having been begot at a time when the father is suffering from that blood disease, secondary syphilis. The mother's healthy uterus would expel it, as it would any other foreign body, from its being stimulated by an unhealthy, vitiated, and unnatural conception."—*Lancet, ut supra cit.* p. 469.—SECRETARY.]

May 23. Tumour from beneath the Skin covering the Glutei Muscles.—Dr. DURKEE exhibited a tumour sent to him by Dr. HENRY C. PERKINS, of Newburyport. It was removed from a clergyman about forty years of age; began to show itself twenty years ago, just below the skin; was always hard to the touch; never painful; produced no inconvenience except as being in the way while the patient was in a sitting posture. Tumour weighed four ounces and one drachm; consisted of epithelial scales, concrete sebaceous matter, carbonate of lime, and phosphate of lime;¹ no cholesterin. Its structure was laminated, and its shape nearly round. It was so hard and solid that it required to be sawed open for examination. The inner surface of the sac containing the tumour was lined with soft epithelium.

Professor Ackley's Case of Hermaphroditism.—Dr. J. B. S. JACKSON made the following remarks: An account of this very remarkable case has already been published in the *Am. Journ. of Med. Sci.* for July, 1853, by Dr. BLACKMAN, of New York; and in the following number of the same Journal is a report to this Society by the late Dr. BURNETT, of this city. Dr. Blackman's paper is accompanied with a wood-cut; casts of the specimen have also been made, coloured, and mounted for distribution; and a copy is in the Society's cabinet, sent by Prof. Ackley. If there is any question, then, as to the facts, anatomically, it is desirable that it should be made known. Dr. Jackson said that he had had an opportunity to examine the specimen recently, through the kindness of Prof. A.; and he thought that the accounts above referred to were in some important points questionable or incorrect.

The os tincæ is represented in the figure and in the cast as a prominent object. Dr. J. found no trace of it; but the uterus passed insensibly into the vagina. This last was nowhere of the full size, and towards the opening into the bladder, measured, at the smallest part, between four and five lines in circumference upon the inner surface; in the Society's specimen of the cast, something like transverse rugæ are represented, but nothing of the kind was seen. The fimbriated extremities of the Fallopian tubes were distinct enough, though very slightly developed.

The very important fact of the existence of ovaries when the testicles were so well developed, should be well attested. Dr. J. found some thickening of the tissues about where the ovaries should be, but it was ill defined and slight; and it would not have been thought of, except in connection with the present question. Upon one side, an incision was made into this questionable part; but nothing like a Graafian vesicle was seen, nothing but a loose cellular or fibro-

¹ The phosphate of lime was detected by Dr. Bacon.

cellular tissue; a yellow body was exposed, which was thought at first to be a corpus luteum, but it proved to be a lobule of fat. Upon the other side, no incision seems to have been made.

One of the testicles had been cut open, and its structure was quite normal; the other had scarcely been cut into. In regard to size, Dr. J. thinks that they were larger than they have been stated to be by Dr. Burnett; his attention, however, was not particularly directed to this point, as he had forgotten Dr. B.'s statement, and did not have an opportunity to refer to it until after his return. Some allowance may, perhaps, be made for the circumstance of the specimen having been in spirit for a number of years. Neither of the organs was dissected so as to show the epididymis, though there could be no doubt of its existence. An incision was made upon a cord that had the feel of a vas deferens, and it was very nearly exposed, midway, to the extent of about two inches; towards the testicle, it appeared to diverge from that organ, so far as could be seen by holding the parts up to the light; but, as no dissection was made, Dr. J. would not say that it was not the vas deferens, and that it did not arise from the epididymis. Towards the neck of the bladder, this cord could not be traced. Upon the other side, something was felt indistinctly that might have been a vas deferens.

The vesiculae seminales were not found.

In the situation of the prostate, there was a feeling of resistance, as if the gland might exist; but it had not been demonstrated.

The penis, scrotum, and other parts, appeared to Dr. J. as they have been already described.

Professor Ackley made a longitudinal incision through the uterus, and very kindly gave permission to Dr. J. to examine, by dissection, several points about which there seems to be a question. Dr. J., however, declined the offer, in the hopes that so interesting a specimen would be examined thoroughly by some professed anatomist.

Sudden and complete Cessation of Premature Labour-Pains.—Dr. COALE was called to a young girl in a state of extreme narcotism, as was afterwards ascertained, from an intentional overdose of paregoric. He discovered she was some five months gone in pregnancy. She was relieved, but Dr. C. was called again within forty-eight hours, and found her apparently in violent labour, the pains regular, and so severe as to cause violent straining, clutching at the bedpost, and bearing down; in short, all the symptoms of severe, active labour. He left word to be sent for again; but receiving no message before the next day, he again visited his patient, and found, to his astonishment that, as the night advanced, the pain left her without delivery taking place.

That partial and irregular contraction in the muscular fibre of the uterus near the full term might occur without expulsion of its contents, may not be very strange; but that such violent contraction should take place in a uterus containing a five months' fetus, and not expel it, Dr. C. thinks worthy of note.

Passage of Air per Vaginem after Delivery, before the Removal of the Placenta.—Reported by Dr. E. W. BLAKE. May 13, Mrs. S. was delivered of a daughter, weighing nine pounds, after a rapid and easy labour. The funis having been tied and the child removed, whilst standing by the bedside, a few moments afterwards, awaiting the throwing off of the placenta, Dr. B.'s attention was attracted by certain peculiar sounds, emanating from the person of the

patient. His first thought was that the desired contraction of the uterus had forced after-birth, coagula, &c. from the vagina, and that their forcible expulsion through this passage had given rise to the *phenomena*. An examination, however, showed that the after-birth still remained, but revealed the real source of the *sounds*. As the hand reached the os externum, the noise was renewed, now affording sensible proof, by the breaking around the fingers of *bubbles of air* forced through the mucus, &c. of the vagina, that their origin was within this passage, and that the *explosions* which continued (audible and evidently annoying to the patient herself) during two or three minutes, followed the uterine contractions. The after-birth was now found to be detached, and as a finger drew down one edge, a sudden and final rush of pent-up (inodorous) air occurred. No other unusual symptoms accompanied this otherwise natural case.

A Precocious Infant.—Dr. BLAKE mentioned the following facts: May 11, attended Mrs. H. in her (fourth) confinement, after a tedious, though not severe labour; the child, a female, unusually vigorous, and weighing, at birth, eleven and a half pounds. On the third day, subsequent to visiting his patient, the nurse asked: "Doctor, do you see our baby laugh?" Incredulous, he crossed the room—but, to his surprise, the infant returned an answering smile to the caresses of the nurse. With a look of intelligence, it turned to the father who stood over it, as he patted its cheeks, and as quickly turned its eyes on Dr. B., when he did the same; and when he stepped aside, its gaze followed him (attracted, he supposes, by his *spectacles*) until, being out of view, it cried aloud; returning to its side, a smile of pleasure again greeted him, and the cry was once more repeated when he ceased to notice the little one.

Here was unmistakable evidence of pleasurable and sad emotions, and showing the distinct recognition of sensible objects, by an infant as yet scarce sixty hours old. That it was no accidental circumstance, the like manifestations, which were daily noticed afterwards, sufficiently prove.

Vagitus Uterinus: the so-termed Sound simulated, in a Case of Operation for Vesico-Vaginal Fistula.—Dr. PARKMAN said that, while performing the operation for the union of vesico-vaginal fistula, he had heard a sound which closely resembled that described as *vagitus uterinus* of the infant. In this case, the sound doubtless arose from motion communicated to the mucus and other secretions in the vagina.

Dr. BIGELOW, Sen., remarked that in foot and breech presentations he had frequently heard a child cry before the head was out of the vagina; the face presenting, so that the mouth was near the external air. He added that, in such presentations, after the body is delivered, if, on examination, the child be perceived to gasp, and, at the same time, kick convulsively, these are signs of danger to its life; if, at this moment, two fingers can be introduced, so as to draw down the jaw, and, by pressing back the perineum, admit air, the child will live; forcible attempts at delivery of the head will not then be necessary, and Dr. B. believes that the head will, in such cases, be naturally delivered.

June 12. Revaccination; Question as to its Necessity, &c. &c.—The question was raised by Dr. STORER, and a discussion ensued, in which several members took part; a condensed account of the opinions expressed is subjoined. Most of the gentlemen would revaccinate, *if requested* to do so;

several would certainly do the operation if persons were much exposed; certain members declared themselves *non-revaccinators*.

Dr. STORER observed that two cases had lately occurred in his practice, to which he would refer, with the hope of eliciting the opinions of the members of the Society respecting the subject of *revaccination*; that he might learn the views of the gentlemen present, regarding its propriety, expediency, necessity, and, if necessary, how often?

He felt that he already knew the views of many of his brethren; he wished to hear a free discussion from *all*. As so many cases of serious inconvenience, to use no stronger language, have occurred in this city during the few past years from revaccination, and as we are seldom called upon to revaccinate a patient unless a larger number of cases of smallpox are known to exist in the city than usual, he was in the habit of pursuing the following course. Whenever a person presented himself for revaccination, he inquired if he had recently been, or expected to be exposed to a case of smallpox? If his answer was in the affirmative, he vaccinated; if in the negative, he advised that the operation should not be performed.

Two or three months since, he was called upon to take charge of a case of smallpox. The wife of the patient had been vaccinated, years before, and her arm exhibited two well characterized vaccine cicatrices. She was disinclined to be revaccinated, and eventually suffered severely from varioloid.

Since this case occurred, a boy nine years of age, whom he had vaccinated four years previously, and upon whose arm were two perfect vaccine cicatrices, was attacked with smallpox, and died at the expiration of four days. This latter case naturally awakens the inquiry, how often should vaccination be resorted to? The common notion that it should be performed every seven years, would not answer. In this case the system had not been protected for four years. Ought we to consider this merely an exceptional case? Ought we, as a general rule, to advise revaccination? and if so, how often?

Dr. C. E. WARE reported that he had seen one case in a teacher, who had contracted the disease by visiting a house adjoining that in which a person was sick, and afterwards died, of smallpox. The disease was of so light a character that it did not confine him, and he, supposing that it was merely a cold, visited his pupils as usual. All his family, consisting of five members, all of whom had been vaccinated formerly, but not at that time, had varioloid. None of his pupils contracted the disease.

In four other families, Dr. Ware had recently had a single case of varioloid. Although some of the members of these families were revaccinated, most of them were not; and yet, so far as he had learned, although the period of incubation was long passed, there had been no second case of varioloid. In another family, of many members, although none were revaccinated, there were only two cases of varioloid.

Dr. INCHES desired, as the question of duty, by Dr. Storer, in his case of variolous disease had not been answered, that some advocate of revaccination would state the laws of the durability of protection by vaccination, and consequently the frequency of revaccination necessary to secure protection. This is important, first, because the whole population cannot be revaccinated at each invasion of smallpox, and secondly, because during epidemics of smallpox and erysipelas, severe general and local symptoms occasionally attend the operation of revaccination. Therefore, if revaccinations are to be repeated, it should be at periods insuring protection, and at moments when the above epidemics do not prevail. Dr. I. felt, however, that he did his duty when he tested each vaccination by an immediate revaccination.

In considering the question of the necessity of revaccination, Dr. COALE thought that there were several parts to the proposition, several previous questions to be answered. That the system is capable, after an interval, of a second, or even third impression by vaccine virus, has long since been shown by the result of revaccination in the Prussian army, and in Wurtemberg. The results are herewith given, and we have every reason, in the known high discipline of the Prussian army, to rely perfectly upon these statements. [Dr. C. here quoted the following paragraph from the *Medico-Chirurgical Review*.]

"The Practice of Revaccination.—Every medical man must be aware that the propriety or necessity of this practice has excited much attention of late, although its investigation has been unaccountably neglected by the profession in this country. To us, there seems no one valid objection to urge against it. It has been said, indeed, that such adoption would unsettle the public mind in its faith in vaccination. Nor need this be regretted. The most fatal condition of the public mind, and from which much evil has already sprung, is *apathy*. Let public attention be fairly aroused, the merits of vaccination will then undergo renewed discussion, and its more general adoption must be the result. It is especially to Prussia and Wurtemberg that we are indebted for the experiment of revaccination upon a large scale. In the former country, of 216,280 revaccinations during 1833-7, there were 84,516 successful; and of 44,000 in the latter country, 20,000 succeeded. Frequently, too, cases which failed on a first trial succeeded on a subsequent one. The precise proportion of successful cases has varied from 31 to 45 or 46 per cent.—the period between the ages of 10 and 30 being found that most certain of success. Of course, no one infers that the success of revaccination implies a liability to smallpox in an equal number of cases. The operation, in fact, in the hands of Heim, proved successful also in 32 per cent. of persons who had already had the smallpox—a proportion infinitely greater than that in which the smallpox occurs a second time. But, although we are unable to state the exact proportion of the vaccinated persons, in whom revaccination succeeded at the rate of 34 per cent., who would otherwise have acquired smallpox on exposure, yet experience has shown that this might have been considerable: whereas, among the many thousands who have undergone revaccination in Prussia and Wurtemberg, an example of the occurrence of smallpox has only here and there been observed. Moreover, in the case of an epidemic breaking out, it has been found, in various localities, that immediate revaccination has *arrested its course*—individuals in whom the operation proved successful and those in whom it failed equally resisting the disease."

The interval after which the system becomes impressible for the second time to the vaccine impression seems, from these reports, to be somewhere about seven years. But now, having answered this, there is another question: Is there any relation between the susceptibility to vaccine virus and to variolous virus? In other words, is a person who is susceptible to a second impression of vaccine necessarily susceptible to smallpox? Dr. C. thinks that, reasoning from analogy, we must believe that there is, and that a person who is susceptible to the vaccine impression, is also to that of variola. It is true that we cannot fix this by actual experiment very readily, for the system of the individual is more susceptible at certain times than it is at others. We vaccinate a child repeatedly without making any impression upon it. Two months afterwards, upon another introduction of the virus, it "takes." So with variola, persons at one time exposed to the contagion, are unaffected; at another, a much slighter exposure gives them variola. Dr. C. himself was exposed for six months on board a ship where the disease was prevailing for that length of time, and men died of it in its most aggravated form. He did not, however, become affected until the disease was leaving—his case being the last but one, and that one was a brother officer, who had at the beginning of the

epidemic, six months before, assiduously nursed a case both night and day, without taking the disease himself. These facts should make us chary of deducing from the immunity of a person at any particular time that he is *well* protected; and with the facts exhibited in the Prussian reports, numbering cases by hundreds of thousands, if the numerical system is worth anything, we ought surely to feel that it is our duty to encourage revaccination, and at periods not longer, as a general average, than seven years. Nor should there be any discredit to vaccination or detriment to the glory and greatness of Jenner's discovery. The prophylactic is just as good as he demonstrated it to be, it only has to be administered several times, at long intervals in the lifetime, instead of one dose sufficing.

Dr. DURKEE said that if the reports respecting revaccination in Prussia are reliable, it is quite certain that the vaccine element in that country possesses different qualities from those universally attributed to it in this country. We must either assume that these reports are not entitled to credibility, or else admit that the fame of Jenner rests upon the sand.

Or what is probably nearer the truth, we must suppose that there is some defect in the mode of conducting the business of vaccination among the Prussian troops. If a physician among us were to state that he had vaccinated in a thorough manner five hundred persons within the last five years, and that, of these, one in every four had been successfully vaccinated a second time, should we not look upon the statement as a very strange one, judging of it in the light of our own experience? Should we not suspect some radical error in his method of treatment?

A second attempt at vaccination often results in producing a pustule in the arm of a person who has already had true vaccinia; but this passes through its several stages more rapidly than in the genuine disease, and its aspect from beginning to end is wholly unlike true kine-pox. Nor does it produce constitutional symptoms; or if it does, they are of the most insignificant and equivocal character. The whole affair, in all its features, is a mere counterfeit.

Dr. D. was confident that the experience of the thousands of physicians who have been in practice in the United States twenty or thirty years, would sustain the opinion that one genuine vaccination is sufficient for life. This is the rule. To this there are exceptions, but these exceptions are rare compared with the millions of our population that are protected. There is good reason to believe that the great majority of physicians feel a personal responsibility in all instances of the vaccine disease which they undertake to produce; and if the vaccination is properly conducted, it is not probable that more than one out of a thousand persons, thus carefully treated, ever suffers from varioloid or smallpox. Take the city of Boston: Since the existence of the municipal law which requires that every child shall have a certificate of vaccination from a respectable physician, before it can be admitted into any of our public schools, probably more than 50,000 children have had kine-pox, and it is truth to say that physicians and citizens generally consider these children safe. The law has its origin in this idea of safety, which is the result of many years' experience relative to the prophylactic power conferred upon the system by the vaccine disease. This confidence need not be shaken by any tidings that come to us from the Prussian army or from any other quarter.

Dr. GRAY had repeatedly revaccinated patients at their request, but in no instance had a good vesicle been produced. He was, therefore, led by his own experience to believe the proceeding useless, and to oppose a repetition of the operation, on the ground that it would create an unnecessary alarm in the

community. It remains to be proved by its advocates that a second or even a twentieth vaccination renders an individual more secure than the first. There are instances to show that revaccination, in case it be necessary, should be repeated at very short periods, indefinitely. Two cases of varioloid had occurred in his practice during the past summer, in children under five years of age, one of whom had been properly vaccinated within a year. It was advised by many that revaccination should be practised wherever individuals were liable to exposure. Without denying the wisdom of such advice, he would merely state that, with a single exception, no case under his care of variola or varioloid during the last twenty years could be traced by the patient to any known cause. From the circumstances above mentioned, Dr. G. was led to express the opinion to his patients that one vaccination only was advisable, and since the alternative is a frequently-repeated operation, rendering the community constantly anxious about this formidable disease, he must be thoroughly convinced of his error before he would do differently.

Reference having been made to the distinction between variola and varioloid, Dr. STRONG said that he would consider all those cases which "stop short of the full developments of smallpox, as *varioloid*;" in these, the disease "fades away," as it were. In respect to contagion, and its power over individuals, Dr. S. supposes the amount of exposure will be the criterion of frequency in taking the disease; he himself had varioloid in two weeks from the time of inhaling, accidentally, the breath of a person ill with smallpox.

[In defining variola, authors give the preference to the division into discrete, confluent, and modified smallpox; the latter is the disease "modified" by previous variola in the patient, or by vaccination, and of course answers to the term *varioloid*, correctly speaking. Dr. Watson prefers to say "modified smallpox." *Varioloïde*: Synonymie—*Variole modifiée*; *varicelle pustuleuse ombiliquée*. (Grisolle.)—SEC'Y.]

In regard to the Prussian army statistics, members seemed to differ, widely, in opinion. Dr. STORER was surprised to find that they were brought forward, as worthy of any confidence in fixing a result of any sort—he had supposed that they were, long since, pronounced unreliable.

Dr. PERRY, referring to the researches of the late Dr. FISHER, remarked that Dr. F. had given his opinion in favour of revaccination, and that he had expressed confidence in the Prussian statistics.

Dr. C. E. WARE thought the Prussian experiments were only "half made;" they only prove a susceptibility to revaccination, not to the taking of smallpox or of varioloid. Dr. W. revaccinates, if asked to do so.

In reference to the soreness of the entire arm, frequently following revaccination, Dr. PUTNAM remarked, that it is quite often ascribable to irritation from the clothing over the punctures. If desired, he revaccinates; he mentioned the case of a lady who had had smallpox by inoculation, in her youth; on revaccination, a well-formed vaccine vesicle was produced.

Dr. CABOT related a similar case.

Dr. INCHES inquired of Dr. COALE, whether, in the Prussian army, those who were revaccinated for the third time, would be considered fully protected?

Dr. COALE supposed not, *with certainty*, but they assuredly were protected in great measure.

Dr. SHATTUCK, in an instance of the occurrence of varioloid, had revaccinated certain members of the family; in one person there was an abortive pustule; varioloid was subsequently declared in that individual. No other case in the family.

Dr. PUTNAM asked if any of the members present could offer any valid objection to revaccination?

There was no reply. The only objections previously made were the occasional sore arms, and alarm of the community. If solicited by their patients, they would doubtless not *refuse* to revaccinate.

[“Some have recommended the repetition of vaccination at intervals of a few years. This is a wise precaution, justified by experience, and, if adopted, should be performed a second time at about ten years of age, or from this to the age of puberty.” (*Hooper’s Vaile Mecum*, p. 251.) Dr. WATSON (*Pract. Physic*) says: “There seems reason for suspecting that the protecting influence of cowpox diminishes by lapse of time, and at length wears out;” * * revaccination at a distant period reproduces, in a greater or less degree, its primary effects. He mentions the case of a father and son revaccinated; the boy somewhat affected, the father not at all. “It remains to be determined,” he adds, “whether all those who are susceptible of some impression from a second vaccination, are liable to be affected by the contagion of smallpox; and whether a repetition of the operation of engrafting the cowpox, renews, or adds to, their security against smallpox. At any rate, the practice of revaccination is a safe and advisable precaution.—*Op. cit.* p. 739, vol. ii. English edition.

During a session of the *Société de Médecine Pratique* at Paris, March 2, 1854, the following facts and opinions were given, as stated in the *Gazette des Hôpitaux Civils et Militaires*, of April 29, 1854:—

“*Variola; Influence of Vaccination.*—M. DUPERTHUIS had seen, during the winter just preceding the above dates, 57 variolous patients; of these, 35 were from 3 months to 18 years, old; 22 were from 30 to 60 years; between the ages of 18 and 30 years there was not a single case; 30 of the 57 had been vaccinated; these were among the oldest; there were 2 deaths—ill-fed and feeble infants were the subjects; one patient, a man of 32, was quite delirious.”

M. Duperthuis states that he revaccinated several persons who had already been submitted to the operation; he did not obtain any characteristic vesicles (*boutons*).

M. GUERSANT remarked: “That the statistics of M. Duperthuis, although upon a small scale, as to numbers, were important and instructive. Thus, variola had occurred 35 times in patients under 18 years of age, many of whom had never been vaccinated. In this there is nothing surprising, except that, since certain of this number were inoculated, the result would prove that the vaccine disease does not infallibly (*sûrement*) protect the individual up to the said age. On the other hand, as no case of variola was observed between the ages of 18 and 30 years, admitting the undeniable (*irrecusable*) influence of the vaccine inoculation, it would be shown that vaccination may protect from smallpox up to the 30th year; and, finally, there having been 22 cases of variola in persons between 30 and 60 years of age, it would follow that after the 30th year, it is requisite to be revaccinated.”

M. Guersant alluded to the greater exactitude which would have been attained, had M. Duperthuis noted down precisely the number of persons in each series, who were, or not, vaccinated.

M. MASSON said “he could not entertain the opinion generally received, that variola is rare in vaccinated children. He had revaccinated 17 individuals, 5 of whom presented a perfect vaccine vesicle,” (*les caractères d’un bon vaccin*.)

M. THORE remarked “that we must not believe an infant is vaccinated, merely because it has been submitted to the operation of the inoculation of the vaccine virus. From the fact that the eruption is not watched throughout its successive developments, it often happens that abortive pustules (*faux*

boutons) are mistaken for good ones. Moreover, on the other hand, very marked varioloid may be pronounced to be genuine variola, and every one is aware that, so far as contagion is concerned, a great distinction is to be established between the two affections."

M. Masson "could not adopt (*rejeter*) the principle that vaccine protects from variola until the 30th, or even to the 20th year. He had seen a lady, 19 years of age, attacked, after her accouchement, by confluent smallpox, while upon her arm there were large scars of vaccination."

M. Guersant replied "that vaccination has both its partisans and its opposers (*detracteurs*); but the facts given by M. Duperthuis support the opinions of the former, and are in favour of revaccination."

The above discussion has been slightly abbreviated; the facts and opinions given seem of sufficient value to authorize the extracts made.

The opinion of GRISOLLE is given in favour of revaccination. He remarks as follows: "This important question is not yet settled. Nevertheless, very numerous official documents, collected particularly in Denmark, Sweden, Germany, Prussia, and England, and certain of which have been analyzed by two distinguished physicians, MM. Dezeimeris and Hardy, in the 2d volume of the journal *L'Experience*, prove that variola is very frequent in individuals who have been vaccinated. This is an undeniable fact, and has, indeed, been long known." M. Grisolles quotes M. Serres, as stating that, within a few years, more than one-third of the persons reported diseased with variola have been the vaccinated; and the proportion increases yearly. Again, "variola (*Grisolle*) which is rare within 9 years from vaccination, is very frequent (*sévit surtout*) in persons who have been vaccinated for 10, 15, or 20 years. This authorizes us to believe that the vaccine virus only temporarily protects from variola, and that it is proper to revaccinate. It may be objected that (which is indisputable) after 35 years of age, the susceptibility of contracting smallpox becomes very feeble, indeed nearly null, which proves, according to Serres, that the presumed diminution of the preservative of the vaccine virus is not the sole cause of vaccinated persons being affected with variola." The author insists on the susceptibility of young subjects to the contracting of variola, &c.; from this he would apparently deduce an argument for more frequent repetition of vaccination in youth, and so proportionately to diminish the operations with the lessening necessity. Furthermore, M. Grisolles adds: "Revaccination is generally practised in the countries of northern Europe, and is beginning to be adopted in France. By the aid of revaccination, applied generally, variola has been almost completely extinguished in the Prussian army, and in the kingdom of Wurtemberg."—*Pathologie Interne*, vol. i. p. 105.—**SECRETARY.**]

Tænia.—Dr. STORER referred to a case. A middle-aged woman, after suffering from an irregular condition of the bowels for several months, voided three feet of this parasite, and after the administration of an active cathartic, two feet more were passed. Half an ounce of kousso was administered, in infusion, without producing the slightest effect.

Dr. S. referred to this case, particularly, to call the attention of the members of the Society to the unusual number of similar cases which have been reported during the *last* year.

Dr. Storer asked if cases of *tænia* are not comparatively rare in this country? From the infrequent reports of cases, hitherto, such would seem to be the fact.

Dr. ABBOT saw a case, the last week, and advised pumpkin seeds as a remedy.

Dr. PUTNAM mentioned a case in which these seeds were successful.

[Prof. PATERSON (*Philadelphia Medical Examiner*) states that, in 1852, he reported a case of radical cure of taenia by the use of pumpkin seed emulsion, after oil of turpentine and even kousso had signally failed. The fixed oil from the seeds is the anthelmintic principle, and has been employed with the happiest effects in doses of $\overline{3}$ ss. twice in the day, followed by an ounce of castor-oil.—SECRETARY.]

Tubular Pregnancy.—The specimen, with a history of the case, was sent by Dr. T. F. OAKES. The patient was an unmarried woman, twenty-five years of age. Complained of occasional nausea and vomiting, and of pain in the region of the uterus, for a week or ten days before the fatal attack. On the 16th ult. she arose in the morning better than usual. At 11 A. M., while doing some light work in the yard, she was suddenly attacked with violent pain in the abdomen, faintness, and nausea. With some difficulty she was got upon a bed, and Dr. O. saw her half an hour afterwards. She was then so exhausted as to be unable to answer questions. Countenance pale and haggard; eyes sunken, and the whole surface cold and moist; pulseless; nausea excessive, with retching and occasional vomiting of bilious fluid. Complained of great pain in lower part of abdomen, with tenderness on pressure. Stimulents and opium were used, but she died in about four and a half hours from the time of the attack.

About fourteen piuts of coagulated blood were found in the peritoneal cavity. The pelvic organs were removed, and after a partial examination, were handed to Dr. Jackson, by whom they were shown to the Society. The uterus is enlarged, measuring four and a quarter inches in length, now that it is cut open, and it is changed in structure as is usual in the gravid state. The decidua is remarkably well-developed throughout the fundus and body, but ends, as usual, at the commencement of the cervix; the only peculiarity noticed being the absence of the characteristic punctated appearance.

The existence of a decidua, in the case of tubular pregnancy, has often been questioned, as is well known. The left Fallopian tube, which contained the ovum, was of about the usual size for some distance from the uterus, and then very suddenly dilated into a thin, firm, membranous cyst, which must have been nearly as large as the fist, there being nothing like a decidua upon its inner surface. The ovum was sufficiently well-developed, and the foetus was not far from three months old, the spine measuring two and one-eighth inches in length; cord seven and three-fourth inches long. The fimbriated extremity could nowhere be traced, and neither could the seat of perforation in the tube be found. These cases usually terminate, as is well known, in the rupture of the tube and hemorrhage into the peritoneal cavity. Dr. J. remarked that in all of the cases he has seen, excepting one, the hemorrhage had occurred at the sixth or eighth week; the period in the present case being unusually late. The ovary was closely connected with the dilated tube, and contained a well-marked corpus luteum, $1 \times \frac{1}{2}$ inch. It should have been stated that a pretty distinct puncture was found upon the inner surface of the body of the uterus, as if some mechanical attempt had been made to procure abortion.

Upon the other side was a fine specimen of dropsy of the Fallopian tube; a thin, firm, membranous cyst, of a rounded form, nearly, or quite the size of the fist, and filled with clear, yellowish serum. Upon the surface of this cyst, and intimately connected with it, the tube was distinctly seen when inflated, being considerably dilated until it was just about to open into the sac, where it suddenly contracted so as not to admit the smallest probe. The opening, however, was seen upon the inner surface; and the fact of its being free was

proved by inflation. The inner surface of the sac had the appearance of a serous membrane. Fimbriated extremity quite obliterated. Ovary spread out over the sac, and intimately adherent, though distinct.

Powerful Effects from small Quantities of Opium and certain of its Preparations—Ingestion of five grains of Opium—Excessive Narcotism, &c.—Cases—Remarks—Table of Cases reported to the Society.—Dr. MORLAND read the following account:—

A gentleman 76 years old, of spare habit and of much muscular activity, though somewhat infirm, and who had been suffering from loss of appetite, costiveness, &c., depending on slight derangement of the biliary organs, took five grains, accurately weighed, of solid opium, in pilular form, it having been mistaken for blue-pill mass; both substances lying together. The pill was swallowed on going to bed, at about 10 o'clock P. M., April 7, 1854, and the stomach was quite empty, nothing but fluids having been taken for the two previous days. It being noticed that Mr. — had not risen at his usual hour, a friend went to his room and found him fast asleep and breathing heavily, with some stertor; not supposing this of any consequence, he was left, and was afterwards visited twice, at about hour intervals, with the same result; it now being considered unusual, the same friend suddenly thought of the possibility of mistake, the evening before, in the medicine taken, and, examining the two substances alluded to, found, to his dismay, that opium had been used instead of the blue mass. A few minutes after this discovery, I came to the house for the purpose of visiting another patient, and was desired to see Mr. — immediately. On entering his chamber, found him lying on his left side, breathing with an occasional snore; he was bathed in perspiration, which, increased by warm coverings, had soaked his night-flannel and shirt, completely—had wetted the sheets and pillow-case, and even the ticking of the bed. He was immediately shaken, and attempts made to rouse him; the skin of the face was of a dark-red colour; he spoke indistinctly, and said that he would get up, that he had had a very good night, and he wished to know why he was shaken, &c.; between these expressions, he would sink off towards sleep again; finding him unable to rise, his linen and flannel were changed, and his body well dried with a towel, and he was then *taken up* and dressed by myself and an assistant, apparently almost insensible. He was next *walked about* and taken out into the air, his legs bending and dragging, and he sinking upon one assistant, if the other for a moment left him. Although it was supposed that the opium was wholly absorbed, having been taken under circumstances so entirely favourable to its complete effect, emetic action was freely induced by means of salt and water, and mustard and water (no more powerful emetics being at hand); emesis seemed more efficient than anything to cause an approach to waking; strong coffee was freely administered, with some effect; the fumes of strong water of ammonia were allowed to enter his nostrils, &c. &c.; continual efforts through the day were required to keep him awake—the eyes closing immediately on ceasing to engage his attention, and heavy sleep with stertorous respiration occurring whenever he was left quiet. At times, the lethargic state seemed to have a sudden access, and scarcely by shaking or by pinching, could he be aroused; often, he did not feel severe pinching.

Taking into consideration the previously constipated state of the bowels, and the additional reason for purgative action, injections of soap and water were given, freely (five in all; Oss at a time); also, hydrarg. chloridi mit. et pulv. jalapæ, āā grs. x; pulv. ipecacuanhæ, grs. v, in one powder; and, after some

hours interval, there being no operation, one and a half drops of croton oil were given, in pill of crumb of bread; in from $\frac{1}{2}$ to $\frac{3}{4}$ of an hour, a very moderate discharge took place. The urine was suppressed throughout the day, although efforts were made by the patient to pass it, occasionally, from a sensation as if of need. At the fecal evacuation, however, it passed freely. About this time there came on a troublesome itching of the arms and chest. Pulse, about 60 through the day; towards evening, 68 to 70; feeble. The dusky-red of the skin of the face, seen in the morning, changed to *extreme* pallor in the forenoon, and so remained; pupils of the eyes not remarkably affected; perhaps a slight contraction. The soporose state left the patient *quite suddenly*, within a few minutes even—efforts to keep him awake being no longer found necessary. The night was restless, with snatches of sleep, only. The effects of the dose were evident for many days; headache, obstinate constipation, unwillingness to move, and weakness, persisted; there was also complete anorexia. Patient is now, April 20, as well as usual.

Although the quantity of opium absolutely requisite to suspend vital action must always vary with circumstances, and often, especially, by the habits of the individual, even the quantity taken in this case might well enough have been fatal, under the existing conditions. CHRISTISON has recorded a case in which four and a half grains, combined with nine grains of camphor, were fatal in nine hours. Under other circumstances, doubtless, five grains would hardly have caused such very marked effects as have been above related. The prolonged effect of so little, comparatively—the excessive resistance to purgative agents and the long-continued *after* influences (not certainly very usual after recovery from the immediate effects), may seem of sufficient importance to warrant a report of the case.

Dr. Christison opportunely draws attention to the importance of knowing, approximatively, the *smallest fatal dose*; for, says he, “in consequence of the dread entertained by many unprofessional persons of this drug, it is currently believed to be much more active than it is in reality, and instances of natural death have been consequently imputed to medicinal doses, taken fortuitously, a short time before (*op. cit.* p. 657). The recording of such powerful effects as are occasionally observed from small quantities even, of opium and its preparations, may also be of service by inducing greater caution in the use thereof, without medical advice and prescription; it may tend to prevent the keeping of such potent remedies in places where mistakes are liable to be made, and where reckless use of the drug is possible.

GRISOLLE states that “he saw narcotism induced in a lady by the ingestion of three centigrammes of opium;” the *centigramme* being about one-sixth of a grain, this would give only *half a grain* for the quantity taken. The same author adds that twenty centigrammes (grs. $3\frac{1}{4}$) have sometimes killed *adults*, and that one or two drops of laudanum may cause the death of a newborn infant. (*Path. Int.* vol. i. p. 827.) Laudanum has been said to become stronger by *being long kept*; Dr. Bigelow, Sen., declares this to be incorrect, at least when dropped without shaking;—if the sediment be stirred, a *very slight* increase of power is possible. ORFILA (*Dict. de Médecine*, p. 261) says: “I have seen all the symptoms of an extremely severe (*peuible*) narcotism experienced by two young ladies, after the application of opium plaster to the temples.” He does not state the proportion of opium used in preparing the plaster; certainly the amount absorbed must be, comparatively, very small. TAYLOR (*Medical Jurisprudence*) gives a case as occurring in 1838, of a man, aged 45 years, who died from the effects of ten grains of solid opium which he had swallowed. Also, another instance, in which eight grains

proved fatal to a woman, 38 years of age; the quantity, moreover, was taken in two doses. Interval not given.

Many authors refer to the fact of very powerful and alarming effects upon young children by exceedingly small doses. Orfila cites the statement of SUNDELING, "that the smallest doses (*les moindres doses*) act with activity in infants; the works of medical authors abound (*sont remplis*) with facts which support this opinion." (*Dict. de Médecine*, en 30 vols. p. 259.) Members of this Society have, in former years, reported very marked instances. Dr. HALE related the production of narcotism in a child one month old, by one-twentieth of a grain of acetate of morphia. The same gentleman also stated the occurrence of "alarming" narcotism in a child, from taking one drop of laudanum; and said, moreover, that he had witnessed in another child the same symptoms, after the use of "cough mixtures" containing minute quantities of opium, in some form; and again, by "cough lozenges." Dr. H., from observation of many such instances, concluded that opiates have a greater effect upon children, in proportion to the quantity taken, than does any other medicine. (*Vide Records of Society*, 1843.) With a view of presenting the results of several cases of poisoning by preparations of opium, so many as it is possible to collect by search of the volumes of past records, will be grouped in a tabular form below; among them are other examples of strong narcotic action from minute doses, and especially in infantile cases. In consequence of the loss of one volume of the Society's *Records*, any cases therein cannot be cited; one or two are not tabulated, from want of precise data. It is believed that all but two or three are given.

While referring to cases observed in children, one published by Dr. EDWARD SMITH, of London, in the April number of the *Association Medical Journal* (London), may be mentioned. In this instance, one-twentieth of a grain of opium proved fatal to an infant six days old, in eighteen hours after the administration of the dose. Syrup of opium, of the French Pharmacopœia, was the preparation; three-fourths of a grain of crude opium to the ounce of fluid. Artificial respiration was most efficient towards keeping up the action of the heart, which latter was quickened or slackened, according to the use of this means. The usual symptoms of poisoning by opium were induced in about half an hour, coma closing the scene.

In 1838, at a meeting of the Society, Dr. G. C. SHATTUCK, Jr., while referring to the liability of children to be even killed by very small quantities of opium, remarked that, in adults, the habit of drinking ardent spirits may have some effect in diminishing the susceptibility to the action of opium. Dr. S. at that time asked Dr. Bigelow, Sen., what he would consider the minimum fatal dose of opium or laudanum?

Dr. BIGELOW replied that, according to the Edinburgh Dispensatory, it is about four grains of opium, or one hundred to one hundred and twenty drops of laudanum. He added, that he had previously stated to the Society the occurrence of several cases in which an ounce of laudanum had been taken with impunity. (*Records*, 1838.)

An important question, in all cases, is the *quality* of the preparation, and as laudanum is perhaps most commonly used for suicidal purposes, we observe, oftenest, variations in the effects of large and of small doses; idiosyncrasy in individuals is a more rare, but doubtless not an infrequent element in the wide difference of the action of the drug.

A case was some years since reported to the Society by Dr. CHARLES E. WARE, in which 3ij of laudanum were taken by an adult female, entire recovery ensuing; she was not in the least narcotized, but, on the contrary, was

highly excited; there was spontaneous vomiting. She bought the tincture at two different druggists. It is very possible that an inferior quality of laudanum was dispensed; indeed, with a superior kind, her escape would have been extraordinary.

In the case which forms the basis of this paper, attention may be directed to the profuse *diaphoresis*. This is remarked by Christison in a fatal case examined by him. "The sheets," he says, "were completely soaked, to a considerable distance around the body." This effect of opium has been lately referred to in the Society, when it was administered, in the ordinary doses, frequently repeated, in inflammatory affections; diaphoresis being often obtained very readily, although some have supposed its use would tend, constantly, to constrict the skin.

Subsequent to the reading of the above case and remarks, Dr. PUTNAM mentioned an instance in which five drops of laudanum caused decided and alarming narcotism in an infant seven or eight months old. He also stated that thirty drops of laudanum thrown into the rectum of an adult patient, who had had profuse diarrhoea, caused powerful and even dangerous narcotism. In consequence of such occasional accidents, he is very cautious in the use of opiate injections in cases where there has been violent purgation or diarrhoea.

Dr. PARKMAN said he had known forty drops, given by injection into the rectum, to cause narcotism.

Dr. SHATTUCK, in this connection, reported the following case. The super-vention of narcotism, in this instance, from a small amount of morphia, is the more remarkable, because the existing pain would have been supposed capable of counteracting much of the effect of the medicine:—

W. E. C., *ætat.* 15 years, entered Hospital May 21, 1854.

Patient reports that, on the 12th inst., being quite warm from exertion, he drank freely of cold iced water, and on the same day ate five cents worth of mixed candy. Soon afterwards, was taken with abdominal pain and bilious vomiting.

At entrance, complains of abdominal pain and tenderness. Lies on right side, with knees slightly drawn up. Abdomen not full; the countenance expressive of languor and discomfort; cheeks of natural colour; skin dry; pulse 92, small, quick, and regular; tongue with dirty yellowish coat. Bilious vomiting. Pain somewhat relieved by sinapism.

May 22. Pain in abdomen continues; expectorated 5ij aerated serum, with small masses of yellow mucus floating in it, and streaks and specks of blood; occasional vomiting. R. Sol. morph. sulph. 5j, every four hours; blister, 2 × 3, to epigastrium.

23d. Reports better; lying on right side, as yesterday; very languid and sleepy; has not vomited since last night; skin rather cool. No defection. Large enema of infusion of flaxseed; sol. acaciæ gum., for drink.

24th. Actively delirious through the day, and very restless through day and night; no perception of light or sound; two free defections from enema; no vomiting; passed urine involuntarily twice in the night. Stupid most of time since 6 A. M., and can now scarcely be aroused; pupils contracted, but no suffusion of eyes; no heat of head; pulse 90, more full than yesterday; respirations from four to seven per minute; skin temperate. Has taken medicine regularly until 3 A. M.; none since; swallows with difficulty. Omit morphia; blister, 2½ × 3 to back of neck.

26th. Lying still on right side; occasionally groaning; some restlessness; skin natural; pulse small, sufficiently strong, about 100; tongue moist, with whitish coat. Has taken food with relish. Abdomen quite tense, hard; resonance dull inferiorly; catheter introduced, and 5xii pale urine withdrawn.

June 1. Has been doing well; taken light food. Has vesicular and exanthematous eruption on abdomen.

3d. Walked out.

6th. Diarrhoea produced by eating oranges and a plate of baked beans, in market; slept pretty well in the night; abdominal pain; five or six dejections. Hop fomentation.

9th. No tenderness of epigastrium, but soreness complained of in the hypogaster. Vomited yesterday, P. M.; matter ejected containing some bile, which, he says, is generally the case. R. Pil. hydr. gr. iij, repeated in six hours.

17th. Has been gradually improving to present time.

We have here a case of gastritis, from a large quantity of cold water suddenly introduced into the stomach when the patient was heated; pain and vomiting continuing eleven days, and subsiding under the influence of morphia, of which enough was accidentally taken to produce narcotism; but out of this state the patient came, without any other remedy than a blister to the back of the neck. The convalescence was long, the patient being a delicate boy; and though his diet in the Hospital was carefully regulated, he was imprudent elsewhere, and such causes had something to do with the protracted convalescence. The quantity of morphia taken was about a grain, in divided doses, during an interval of forty hours.

Death from Laudanum (3j) in three-quarters of an hour.—The following account of a case, which occurred in 1849, and was then reported, verbally only, to the Society, has been furnished, at the request of the Secretary, by Dr. G. H. LYMAN.—Mrs. —; age 52 years. Intemperate; has been drinking more or less for three weeks. An ounce of laudanum was taken by the patient, with suicidal intent. Dr. L. saw her in fifteen minutes. She said she had taken the laudanum for diarrhoea; was able to walk about with little or no assistance; begged to be allowed to lie down.

Nothing peculiar in pulse, as to force or frequency; pupils natural; external temperature natural; no evidence of sopor. Dr. L. gave two emetics of sulph. zinc.; could get no stomach-pump. No effect produced by emetics.

In thirty-five minutes after taking the laudanum, she began very suddenly to lose her pulse and muscular power; slight spasms were observed; the lips became livid; there was spasmodic dropping of the lower jaw; the extremities were cold, and, in ten minutes, she was unmistakably dead. The moment her pulse began to fail, frictions and sinapisms were resorted to, and preparation was made for the douche and artificial respiration; but she died before they could be instituted.

She had taken a hearty breakfast about three hours before. Her husband says her habit of drinking was induced by taking great quantities of tinctures (that of opium among others), after an attack of traumatic tetanus, ten years previous to her death.

Three quarters of an hour only elapsed from the ingestion of the laudanum to her death. BECK reports a case fatal in two hours. CHRISTISON says, seven to twelve hours is the average duration.

A case is reported in the *Boston Med. and Surg. Journal*, vol. xi. p. 285, fatal in two and a half hours. Christison also remarks that intoxication retards the action of opium.

[A case, fatal in three quarters of an hour, was reported shortly after the above, by Dr. COALE.—Laudanum, the preparation; amount taken, not known.—Records, 1849. SECRETARY.]

Cases of Overdose of Various Preparations of Opium reported to the Society since August, 1838. Chief Effects, Results, &c. &c.

Preparation.	Quantity.	How taken.	Subjects.	Results.	Effects observed.	Means used, &c.	Year.	Reporter.
Laudanum	℥j	Suicidal intent	Adult male	Recovery	Spontaneous vomiting; nothing serious.	Name recorded.	1838	Dr. Olin.
do.	“2 table- spoonfuls	By mistake	Adult female	do.	No ill effects.	None recorded.	1838	“ Hayward, Sen.
do.	7 drops		Child, 22 mos.	do.	“Severe” narcotism.	Powerful emetics.	1838	“ Fisher.
do.	2 drops	In a mixture by a drunken mother	Child, 6 to 8 weeks	do.	Stupor; lividity of face through 1 day.	None mentioned.	1838	“ O. W. Holmes.
do.	℥j	Suicidal intent	Adult male	Death	No particulars given.	None mentioned.	1841	“ Channing.
do.	3iss		Adult female	Recovery	Coma; slow respiration; insensibility; cold surface.	Powerful emetics; injections; no effect for hours; hyson tea.	1841	“ Storer.
do.	1 drop		Infant	do.	“Alarming” narcotism.	No means recorded.	1843	“ Hale.
do.	℥iij	Probable sui- cidal intent	Adult male	Death	Dying when first visited.	No means used.— <i>Post-mortem examination.</i> Con- gestion of stomach and small intestines; dark purple color of heart.	1845	“ Coale.
do.	℥ss	Not stated	Adult female	Recovery	Spontaneous vomiting.	Sulphate of zinc ℥j. Free emesis.	1845	“ J. R. S. Jackson.
do.	℥j	Not stated	Adult; sex not stated	do.	No particulars given.		1845	“ Hale.
do.	5 drops	Injection into rectum	Child, 18 mos.	Death in 6 hrs.	Powerful action; symptoms alarming; from first.	Had had cholera infantum.	1845	“ J. R. S. Jackson.
do.	℥j	Suicidal intent	Adult female	Death in ½ of an hour	After 35 minutes, failure of pulse and of muscular power; slight spasms; lividi- ty of lips; spasmodic drooping of lower jaw; cold extremities.	Emetics; sulphate of zinc; no stomach-pump could be procured; no emesis produced by zinc twice given; frictions, sinapisms, &c.	1849	“ Lyman.
do.	℥j	Suicidal intent	Adult female	Recovery	Thorough narcotism; livid hue; insen- sible to impressions; no taste.	Ipæacuanha. ℥j—no effect; sulphate of zinc, grs. xx, in 2 lbs. of emetics; mustard given with same effect; “walking about,” infusion of co- bacca, in large quantity; in coffee; powerful emesis followed, with gradual recovery.	1851	“ Strong.
do.	℥ss	Not recorded	Adult male	do.	No particulars given; “effects” of opium mentioned; subsequent mild pneumo- nia.	Injection of alkaline and acid mixtures, alter- nately into the stomach—no emesis; sulphat of zinc—free emesis.	1853	“ C. E. Ware.
do.	5 drops	Not recorded	Child, 7 to 8	do.	Alarming narcotism.	No means recorded.	1854	“ Putnam.

Landanum	30 drops	By injection in- to rectum	Adult male	Recovery	Dangerous narcotism.	No means recorded.	1854 Dr. Putnam.
do.	10 drops	By injection in- to rectum	Adult, sex not stated	do.	Narcotism.	No means recorded.	" Parkman.
Opium in substance	90 grains	"Taken in a freak"	Adult female	do.	Slow respiration; rapid, full, throbbing pulse; coma; strongly contracted pu- pils; effects noticed in about an hour; seen by physician in 3 hours.	Bleeding; emetics; washing out of stomach by stomach-pump; walking patient about; pinch- ing, slapping, &c.; strong coffee.	" J. D. S. Jackson.
do.	2 grains	By mistake	Child, 6 mos.	do.	Slow and difficult respiration; spasms; convulsions.	Washing out of stomach; injecting coffee and brandy into stomach; wetting of head with cold water; stuporisms to extremities; termina- tion by violent purging.	" Coale.
do.	3½	Suicidal intent	Adult female	do.	Found on the street, vomiting; great excitation; pulse frequent, full; pupils contracted strongly; complete stupor; even after emetics; pulse subsequent- ly slow; respiration very slow; stupor passed off, and excitement returned; then stupor, from which patient was easily aroused.	Emetics; 10 grs. of sulphate of zinc with 5ss of ipeacacuanha; dose repeated in a short time. with addition of 20 grs. sulphate of zinc and 5ss ipeacacuanha; no emesis produced; patient placed in the erect posture, and the stomach pasted out; then 1½ pints of strong coffee thrown into it; patient began to rally in 20 minutes after coffee; walking patient about, brushing surface of body, &c.	" J. R. S. Jackson.
do.	4 grs. with 4 grs. ex- tract of bel- ladonna ¹	Accidentally	Child, 9 years	do.	Deep sleep; spontaneous vomiting, from which great exhaustion.	None recorded; the drugs taken after a full meal.	" Coale.
do.	5 grains	By mistake	Adult male	do.	Excessive narcotism.	Emetics; forced exercise; coffee, &c. &c.	" Morland.
Paregoric	"1 tea- spoonful"		Child, 6 weeks	do.	Stupor.	Emetic; no emesis caused.	" Channing.
do.	3j	Suicidal intent	Adult female	do.	Coma; insensibility to impressions.	Stimulants; emesis by feather in throat; walked about; cold affusion.	" Coale.
Acetate of morphia	1/20th of a grain	In rough mix- ture, repeat- ed small doses	Child, 1 mo.	do.	Deep sleep; could not be aroused to take the breast.	No means recorded.	" Hale.
Sulphate of morphia	1 gr. in di- stilled water through 40 hours	Medicinally; in solution	Boy, 15 years	do.	Narcotism.	On omission of morphia, effects passed off.	" Shattuck.

¹ Dr. Anderson (*Monthly Journal*, April, 1854) declares belladonna *remedial* in poisoning by opium;—this instance would seem contradictory.

[The *smallest* amount recorded in the above table is *one drop* of tincture of opium; its effect, "alarming narcotism;" patient, an infant; recovery.

The *largest* amount recorded is ninety grains of opium; coma; recovery.

The *smallest* amount recorded as *fatal*, is five drops, *by injection* into the rectum; patient a child, eighteen months old.

Smallest amount fatal, *when swallowed*, an ounce of laudanum; two instances; adults; in one, death in three quarters of an hour.

Preparation of opium most frequently taken, *the tincture*; 17 times. Opium, in substance, 5 times; paregoric, twice; acetate of morphia, once; sulphate of morphia, once.

Total of cases reported, 26; male adults, 6; female adults, 8; children, 9. One boy of 15 years. Two, sex not stated.

Suicidal intent, 6 times; accidental, 4 times. Administered medicinally, 6 times; taken "*in a freak*," once; intent not recorded, 8 times; in a mixture, carelessly, by a drunken mother, once.

Most efficient means: Emesis; stomach-pump; forced motion; cold affusion; external stimulation; internal stimulants.

Owing to the lack of record, it has not been possible to state the intervals elapsing between the ingestion of the poison and the beginning of its action, and the termination of the same; neither can the time intervening between the swallowing of the drug and the visit of the attending physician, be ascertained, in a sufficient number of cases to make its record here of any avail. —W. W. M.]

Colloid Tumour of the Neck—Several Operations—Frequent Recurrence—Death.—Dr. PARKMAN, exhibited a specimen, with daguerreotype views, and gave the following history of the case. A single woman, 39 years of age, a school teacher by profession, consulted Dr. P. in March, 1852, for a tumour the size of a goose egg, in the left supra-clavicular region of the neck. This was subcutaneous, smooth, round, without lobulations, elastic and fluctuating, as if a cyst with thick fluid contents, usually unattended with pain, but at the menstrual periods there was a marked increase of sensibility. The diagnosis being uncertain, it was decided to cut down upon the tumour, if a cyst, discharge the contents, and to proceed as might be indicated. This being done, there was discharged a thick tenacious, gelatinous, amber-coloured matter, so remarkably glutinous and adhesive, that it could be drawn into filaments two feet in length, resembling, very much, thick mucus, and filling the interstices of a sponge used to wipe it up in the same manner. This was followed by a more consistent substance, slightly grayish in colour, and with faint traces of structure. The finger passed into the cavity showed this to be circumscribed by an almost imperceptible cyst; and the various muscles, as the edge of the sterno-cleido-mastoideus, and the trapezius, could be readily detected. It seemed as if this substance had been deposited directly in the cellular tissue, occupying the space between these muscles. With a view of exciting inflammation and thus closing the cavity, a seton was passed through it. Such was not the result, however; but the cavity soon became filled with tumours growing from its walls. These were soft, painless on pressure, and easily broken down without hemorrhage or any ill effects consequent upon the manifestations. It seemed as if the tumours were composed of the gelatinous matter already described, deposited in a very fine cellular tissue. Under these circumstances, in May, the whole disease was removed by a clean dissection, exposing the muscles and fascia of the lower portion of the neck. The tumour thus removed presented the characteristics already described. Soft,

friable, glutinous, and held together so slightly by a thin areolar tissue, that its removal was impossible in any way but as an amorphous mass. Cicatrization went on rapidly, and in a very short time the patient was attending to her duties. She continued to enjoy perfect health, until March, 1853, when she called Dr. Parkman's attention to a small tumour outside of the original cicatrix, the size of a hazel-nut. There had been pain in the part previous to its appearance, three weeks since, but now there was no abnormal sensation. This tumour was immediately removed, a simple incision only being required. It was situated in the subcutaneous cellular tissue, and presented exactly the same semifluid, gelatinous, glutinous substance as the large tumour. In April a similar tumour, in May two similar, and in August one similar were removed. The appearance of these was always preceded by pain, which ceased when they were developed. They were all outside of, and without any relation to the cicatrix resulting from the original operation, and could in no case be regarded as the growth of any part of the first tumour, which might accidentally have been left.

The wounds all healed rapidly, the patient being hardly confined to the house. The general health during this time remained perfectly good.

In November, attention was again called to another reappearance of the disease. This time, however, the patient being somewhat discouraged, had allowed considerable progress to be made without mentioning its presence. The disease had reappeared as usual, under sound skin, but with its growth it had insinuated itself beneath the cicatrix of the first operation, and now occupied the whole of the supra-clavicular space. The health remained perfectly good. The complete removal of this mass was again advised, consented to, and performed. This time the dissection was much more extensive, exposing the whole superficial anatomy of the supra-clavicular space. The recovery was, however, rapid. The disease removed presented exactly the same characters as before.

January 1, 1854, attention was again called to another tumour, the size of a hazel-nut, which with similar antecedents to all the others, had appeared below the clavicle, over the coracoid process of the scapula. It resembled exactly all the others, and could as easily have been removed. It was decided, however, to wait one month, and an appointment was made for the first of February. On the 20th of January, however, Dr. Parkman was sent for, and found the patient convinced that there was to be a new development of the disease, from the peculiar pain which she experienced over the lower half of the left sterno-cleido-mastoid muscle. An examination detected, in a space of about three inches square, a certain degree of fulness; so slight, however, that it would not have been observed by one not fortified by past experience in the case. A few days, however, were sufficient to remove all doubts on the subject. Within a week a tumour developed itself of the size of a female closed hand. The impossibility of any further operative influence was now evident.

The further progress of the case may be detailed in a few words:—

This tumour having already shown such a tendency to rapid growth, continued to increase, and finally attained a size fully equal to the patient's head, having for attachment the whole side of the neck, and hanging pendulous over the chest. At several points the skin became ruptured from the distension, and the mass unfolded itself through the openings, and several large sloughs were thrown off. The substance of the tumour as thus shown was soft, friable, and could be torn with the fingers, without much hemorrhage, and with

no pain to the patient, presenting always portions of the soft gelatinous matter with the more concrete texture, which has been described. With its advance, however, the tumour became comparatively more solid and firm, though without any actual change of structure.

With the growth of this tumour, the general health began to give way, and death finally occurred in June, about five months after the rapid development first described, and about three years from the commencement of the disease.

The *autopsy* showed extreme emaciation of the whole body. The tumour, as already described, was cut away from its bed, and it was then seen how the disease, originating in the cellular tissue, had gradually attacked the muscles in the vicinity. But a faint trace of the sterno-cleido-mastoideus muscle could be detected, and all the others were more or less involved. The softness of its texture, identical with that already described, prevented any preservation of its form. There was no other appearance of the disease save a deposit the size of an orange, on the edge of the opposite breast. The viscera of the abdomen and chest were perfectly healthy, save some œdema of the lungs, the symptoms of which had been observed a few days before death.

The points of interest in this case will be perceived to be the limitation of the disease, with but one exception, to a single region of the body; the rapid cicatrization of the wounds; the preservation of the general health until the last attack, and the very rapid growth of the disease—so rapid as to be almost perceptible from day to day.

Subjoined is a note from Dr. SHAW, giving the result of several microscopic examinations, made upon the tumours after their removal, at various times; as also upon portions torn from the surface of the tumour, when *in situ*, as has been described.

“My first examination of the tumour from the region of the clavicle, was in *March*, 1853, about a year after its first removal. The tumour was then made up of cells and free nuclei, with but a trace of fibres, and these very fine and pale. The cells were such as are generally found in well-marked cancer, except that they were somewhat smaller, and many of them, instead of presenting the globular or circular form, were elongated or otherwise distorted, having the appearance, so to speak, as if they had run wild. They did not, however, have the appearance of the fusiform fibro-plastic cell. The cells measured, on an average, 0.017 millimetre, and the nucleus 0.012 millimetre, the mean diameter of the typical cancer-cell being from 0.020 millimetre to 0.025 millimetre, and that of the nucleus from 0.010 millimetre to 0.015 millimetre. Though the cell walls were small, the nuclei were of the average size, generally oval, but sometimes globular, with dark and well-marked contour, and nearly filling the cell. Many of the nucleoli were large, highly refracting, and having the appearance of an oil-globule, whilst others were smaller.

“In *April*, the tumour presented the same appearances under the microscope. Many of the cells were elongated and distorted, as before, and their walls pale; yet the nuclei were very large compared with the size of the cells, and the nucleoli large and highly refractive. As before, the cells were a trifle smaller than usual. Small capillaries were observed, admitting the passage of only one or two blood-globules, and these were compressed and elongated so as to have an oval form.

“*November*, 1853. The cells were perhaps a trifle larger than before; the nuclei still large when compared with the size of the cell, with dark contour, and the nucleoli well-marked and oily-like. The nuclei were not merely larger and more prominent than those of the fibro-plastic cell by measurement, but they nearly filled the globular cells, or were nearly as large as the transverse diameter of the elongated cells. There were as before many free nuclei.

“*February*, 1854. At this examination, the cells would not pass so well for cancer-cells as at the previous observations. They varied from the normal form

more than ever, being less regular in size, and in many the nuclei were indistinct, or wanting. Some were found with large nuclei, but wanting nucleoli, and in many instances the nuclei themselves were small.

"*March, 1854.* Last examination. The cells and nuclei at this time were still further from the typical form of cancer. The cells were quite small, but now generally globular, and very pale; the nuclei nearly filled the cells, but were pale, and below the average dimensions; the nucleoli were mere points, or were absent. The cells were few, the free nuclei predominating. None of the cells were fusiform in this or the previous observations, nor did the cells or nuclei correspond to the type of the fibro-plastic elements.

"If any value is to be placed upon our present knowledge of cancer and fibro-plastic elements, it would seem that this growth should be termed cancer. At the commencement, its minute structure had all the appearance of cancer, except that the cells were somewhat smaller than the average (which is not an uncommon circumstance), and were considerably distorted in form. But the nuclei and nucleoli, during the earlier stages of the disease, were typical. They differed from the fibro-plastic elements both in actual and relative dimensions. The nuclei had the dark contour, and the nucleoli the refractive power which are wanting in the fibro-plastic nuclei and nucleoli. Why the minute structure became changed during the progress of the disease, of course it would be impossible to say. Possibly, from the superficial situation of the tumours, and their frequent removal, the cells had an opportunity of easy, rapid, and unrestrained development, such as they do not possess in the ordinary situations and forms of cancer.

"The peculiar character and history of this case may be some apology for an unsatisfactory microscopic examination; and it cannot be expected that the microscope will determine the nature of doubtful growths, until the minute structure of well-known morbid growths shall be better understood."

Syringe for the Injection of Melted Lard into the Vagina, in Parturition.—Dr. COALE exhibited a syringe which he had contrived, and found very useful for throwing warm lard into the vagina, in cases of dryness of that passage in protracted labours, particularly where the head had been pressing some time on a resisting perineum. It consisted of an elastic nozzle some three and a half inches long, to which is attached an India-rubber tube two feet long, having an ivory socket at the end. An India-rubber bottle with an ivory nozzle fitting accurately into this socket, completes the simple apparatus. The elastic nozzle is introduced, directed by the forefinger. The ivory socket remains outside the bedclothes. The nurse having melted the lard and filled the bottle, introduces its nozzle and makes the injection, during which the elastic nozzle in the vagina can be moved about to distribute the fluid. Dr. C. has found that the relief given in this way to the severe pain of tension, and sense of burning, is more than he would have supposed, whilst the labour was in several instances evidently greatly expedited, both by the mechanical lubrication of the lard, and by its softening the parts, and making them yield more readily.

June 26. Pearl Gaiter-Button removed from the Left Nostril of a Child Eighteen Months Old.—Dr. MORLAND showed this, and stated the difficulty he had experienced in extracting it, and which doubtless was in some measure owing to the smoothness, hardness, and shape of the foreign body. A polished disk of the size of this button is far less easily seized and withdrawn, or pried out, than is a bean or any such object. The eye of the button was broken, and, as was seen after its removal, presented a sharp point, which must have wounded the mucous membrane of the nostrils during the extraction, and caused some bleeding. A bent probe, a scoop, and the ordinary small-sized forceps were

unavailingly employed, the button seeming to glide and escape every effort at seizure. A pair of very delicate curved eye-forceps were finally used with complete success at the first effort. They were inserted *closed*, and employed as a lever, prying the button from behind forwards and outwards. It escaped with a *leap*, as it were, going to the distance of several feet. Dr. M. added, that surgeons recommend the use of a small *curette*, or *scoop*, or a *bent probe* (Druitt, Fergusson), or else that, failing extraction, the foreign body "be pushed back into the throat." Removal by the anterior nares is surely very desirable. As to the *scoop*, in one or two instances, the size usually furnished in the pocket-case has been found too large by Dr. M. Certainly, in infants or young children, who are most frequently our patients in these instances, such is likely to be often the case. In several instances mentioned to him, the operators were obliged to resort to very delicate (though strong) instruments; and in one to those contained in a case of eye instruments.

The child above referred to, introduced the button at about 7 o'clock P.M., June 23, and it could, by account, be readily seen at first; but in the hurried and injudicious efforts made by the nurse and others to remove it, they pushed it completely out of sight, and it could with difficulty be reached by instruments, when the child was brought to Dr. M. at 10 o'clock P. M. The child is small, and the features delicate. The nasal apertures quite small. Button nearly half an inch in width, and one-eighth of an inch thick.

Carcinoma of Liver.—Case reported by Dr. STORER. Margaret M—, widow, aged 50, entered Hospital, June 11, 1854. Was well until January last. At that time, noticed an enlargement in right side of abdomen; appetite became impaired, and she experienced slight bilious vomiting, and more or less drowsiness. For last three months has been unable to work, and for some weeks past has kept in bed all the time. For the last ten days has rapidly failed in flesh and strength; except on one occasion, during this period, has not taken any nourishment except wine-whey. Much emaciation; skin deeply tinged with bile; tongue with a dirty, whitish coat; bowels free. On examination of abdomen, a hard, resisting body is observed in right hypochondrium, extending from the edge of the short ribs behind, to within an inch and a half of umbilicus, and outwards and downwards, to inguinal region. Remainder of abdomen tympanitic throughout, with the exception of a small portion just below epigastrium, which is very tender upon pressure, and slightly emphysematous.

Advised tumour to be bathed night and morning with tinct. iodine, and patient to drink freely of the infusion of wild-cherry bark, and to have wine-whey *ad libitum*.

13th. Complains of great pain in abdominal tumour. An effusion noticed on the right of tumour, occupying a small circumscribed space. Copious bilious dejections.

14th. Much less pain in tumour upon pressure.

15th. Constant disposition to vomit; matter ejected, a dark-coloured, bilious fluid. Complains of great prostration. Skin dry and husky. Pulse 120. R. Mist. calcis carbonatis ℥ii; tinct. opii gtt. x. every two hours until relief.

16th. Vomiting continues; hands cold and damp; pulse 120. Died at 6 P. M.

The following notes by Dr. ABBOT, the Admitting Physician of the Hospital, who made the autopsy, are copied from the Hospital Records:—

Body greatly emaciated, of a bright, golden-yellow colour. Lungs healthy. Some slight, old adhesions between upper and middle lobes of right lung. Heart

healthy. Half an ounce of yellow serum in cavity of pericardium. Before opening abdomen, the tumour, recognized during life, was distinctly felt; also a decided fluctuation quite across abdomen. On opening abdomen, the stomach was found to be enormously dilated, extending across the front of abdominal viscera, and from ensiform cartilage to pubes. It contained a quart or more of greenish-black fluid, somewhat viscid. Previously, as much more escaped from the mouth in removing the body before opening it. Stomach very thin, pale, and suffused by cadaveric changes. A pint and a half of yellowish serum was found in the abdominal cavity. Intestines generally much injected, with here and there portions of slimy lymph on surface.

General contour of liver normal. In the substance of the anterior portion of right lobe a mass of firm carcinomatous disease of the size of a turkey's egg was imbedded, not, however, coming to the surface or affecting the outline thereof. A part of the organ free from disease. Colour generally presenting no unusual appearance. Under surface of that portion where the disease existed, adherent to a mass of carcinomatous disease somewhat larger than two fists, which extended to the left and backwards across vertebral column, to which it was firmly adherent, including the pancreas and gall-bladder, and adherent to the viscera in its vicinity, viz: the stomach and large intestines. The mass was, in general, of great firmness; portions of it, however, broke down easily under the finger. It was supposed that an abscess of three or four inches, in an irregular cavity, was broken into and discharged in securing the specimen. Other organs not examined.

Dr. J. B. S. JACKSON gave the following particulars relative to the *post-mortem* appearances:—

An encephaloid mass, not far from the size of two fists, existed in the region of the gall-bladder, and matted together all the neighbouring parts; the liver itself being of about the usual size, and somewhat, though not very extensively, diseased. Upon cutting through this mass, the gall-bladder, which could not before be found, was exposed, and in its cavity was about a dessert-spoonful of biliary calculi; the parietes were dissected, but it did not appear that the carcinomatous deposit commenced in them.

Female Catheters;—preferable pattern.—Dr. PUTNAM remarked that he was lately requested, by a medical gentleman, to employ the catheter for a member of his family. The instrument used was perforated with holes in the usual way, and gave the patient no uneasiness.

A short time afterwards, the gentleman informed Dr. P. that he had introduced the catheter himself, but that, in attempting to withdraw it, he met with considerable resistance, and, on persisting, the pain, which had already been severe, increased to an amount he had rarely witnessed in surgical operations.

The catheter he had used, had, instead of holes, a slit on each side about one-tenth of an inch in width and half an inch in length.

It was suggested that the mucous membrane might have got sucked into these slits and thereby caused the difficulty; but, lest it should be due to peculiar irritability of the bladder, or to some other cause, it was decided to etherize the patient rather than submit her to a repetition of the pain. This was done once only, and a catheter with the common holes was afterwards used without difficulty.

It happened on the following day that another medical gentleman consulted Dr. P. in regard to a patient in whom a similar difficulty attended the use of the female catheter. This also was made with slits, and on substituting the other, all trouble ceased.

Dr. Putnam almost invariably had used a catheter with slits, in the male subject, and had never met a similar embarrassment.

Remedies in Rheumatism—Antimony and Opium—Lemon-Juice.—Dr. HOMANS referred to his former use of antimony and opium, combined, in rheumatism; when free diaphoresis took place, he had found them efficient at cure.

Dr. H. had given lemon-juice, very freely, to one patient, lately; there had been both gout and rheumatism. Age of patient, 35 years; quantity taken, the contents of one-half a dozen lemons the first day (which was the fourth day of the disease); second day, eight or ten lemons consumed; and, before finishing, the larger part of a box. The attack appeared to be diminished in intensity and shortened in duration, according to the usual average of continuance. There was subsequent excessive derangement of the digestive organs. Dr. H. had never seen so much disorder follow the employment of the lemon-juice—for weeks there was complete anorexia.

July 10. Aneurism of the Aortic Arch compressing the Trachea, without Physical Sign of Aneurism.—Dr. H. J. BIGELOW exhibited the specimen, and presented the following case, drawn up by a relative of the patient:—

The deceased was 37 years of age, of a remarkably vigorous constitution, free from any constitutional ailment, and since his youth has not experienced an illness, of a day, sufficient to detain him from his daily business until his final one. About two years since he complained slightly of an affection in his throat, which he supposed was bronchial, as at times he felt a tickling sensation, and at times also expectorated considerably. He did not then complain of difficulty in breathing. He remained in this general state for perhaps a year and more, sometimes so little troubled that he did not speak of it for weeks, but upon taking cold, he complained of his former difficulty. This bronchial affection, as he supposed it to be, became aggravated at intervals until some time in March of this year, when, as he afterwards stated, he ran about a quarter of a mile through the rain to arrive in season to take an omnibus, and thus save a long journey on foot. From this he dated his first real difficulty in breathing. Shortly after this he discovered a slight whistling noise, which he could make voluntarily, but which was not constant, without such effort. This noise increased rapidly, and he began, in April, to find that too much exercise was an additional aggravation to it. Early in May he was examined by Dr. Bigelow, with reference to the cause of this singular noise, and his obstruction in breathing; these examinations suggested several causes, and among others that of aneurism as most probable.

At this time a very little exertion “put him out of breath;” he was obliged to walk very slowly, and the effort of going up stairs was so great that it required a considerable time to recover his tone. He returned to Boston, and in a few days the exertion of walking became too much for him, and he then kept in the house, gradually restricting himself in his movements. From June 18, he was mostly confined to a sofa, where his occupation was to arrange and rearrange his pillows to gain some comfortable breathing position. For a number of days previous to this, he said that he could sensibly feel the obstruction as the air, in its difficult expirations, glided over it. Until within ten days of his death he insisted on going up and down one flight of stairs, but it was a very slow and tedious exercise. He was carried up the last time, and after being laid upon the bed, he lost his breath and sprang for the open window; failing here, he ran through the house to the window in

the front of the house, where, after two and three-quarter hours of most superhuman exertion, he recovered sufficiently to rise from his knees, and was placed upon a couch which had been prepared for him at this window. In this effort his breathing was sometimes gasping, hoarsely and loudly, and sometimes produced quite a shrill whistle. He was never removed from this window—all the doors and windows on this story were kept constantly open to provide air, and his efforts to raise began then to strangle him, so that he was liable to spring up choking, at any moment. The second day after taking his last position, he strangled and was held nearly three hours, seemingly, in the agonies of death, gradually growing weaker and worse, until, having passed through every stage, he fell lifeless into the arms of those who supported him; his pulse had then stopped; there was no perceptible beating of the heart; his eyes, and indeed everything, betokened death. He was then placed upon the couch, and in this situation he remained perhaps three minutes, when suddenly his eyes closed, his lungs became inflated, and in two or three minutes he spoke aloud, in a tone more natural than he had employed for months. He then said that he breathed about as well as ever—felt no obstruction nor any uncomfortable sensation excepting such weakness as made it even impossible to move his arm. He thus breathed freely six or eight hours, when, upon putting the ear to his chest, the same sounds as before became audible. This extreme difficulty came on again, and he lived to pass through seven spasms like the one described, varying in intensity, but diminishing as his strength passed away. During the first spasm his expectoration began to be mingled with blood, and ever after and from that time, he complained of a new kind of obstruction above the place of the other, which, from his raising, appeared to be caused by clotted blood. All day, July 4 and 5, his strength was so utterly gone that he pushed down the obstructions from the outside with his finger, gradually breathing shorter and shorter until evening, when he expired.

The specimen presented a dilatation of the arch of the aorta, apparently ensuing upon atheromatous degeneration, about three inches in diameter, adherent to the trachea, where it crossed it just above its bifurcation, compressing it, and opening into it by an orifice of the size of a dime, which, however, was most effectually plugged by a slender, thin wall of lymph—the result of inflammation, and which had alone hurried death by hemorrhage.

Dr. Bigelow had repeatedly auscultated the patient, as had also several gentlemen, among whom was Dr. Bowditch, and no abnormal sound whatever, connected with the circulation, could be detected—neither impulse, thrill, nor murmur. The obstructed trachea alone yielded a noisy respiration, a little louder in one lung, its maximum near the supra-sternal fossa.

Dr. B. remarked that similar cases of evidence of thoracic aneurism are not very rare. He thought that thoracic compression of the trachea, gradually increasing, might, in default of evidence of other disease, be attributed to aneurism as its most probable cause.

Urinary Calculus formed upon a Leather Shoestring.—Dr. BROWN, of Bangor, Maine, exhibited the specimen, and reported the case. The patient was a man, æt. 27, and grossly addicted to onanism. Fifteen months ago he passed the string into the urethra after he had gone to bed, and went to sleep without removing it; in the morning it had disappeared. One or two months afterwards, urinary symptoms appeared; and these became so urgent, that he was obliged to give up work last autumn, and for some time past has kept his bed. About a week ago the calculus was removed by Dr. Rich, of Bangor,

assisted by Dr. Brown; the lateral operation of lithotomy was performed, and the patient has done well since.

The calculus is of a regular, oval form, somewhat flattened, and measures nearly two inches in length. The chemical composition, according to the analysis of Mr. J. C. White, student of medicine, is: "Phosphate and carbonate of lime—the latter being slight—with a slight trace of double phosphate of ammonia and magnesia. No uric acid nor urates in the portions examined." One extremity of the calculus having been broken away in the removal, the foreign body has been fully exposed.

Prof. MUSSEY, of Cincinnati, who was present at the meeting, mentioned a similar case in which he had operated, about two years since. The patient was a young man who had introduced (in accordance with medical advice, as he stated) a piece of cord into the urethra, for the purpose of allaying irritation. While introducing it, an unexpected occurrence surprised him, and caused a suspension of the operation, during which time the cord disappeared.

Dr. Mussey saw the patient three months afterwards, and was led from the symptoms to suspect the presence of a calculus in the bladder; at that time, however, it was impossible to detect any stone on examination by the sound. Two months later, a calculus was at once distinctly felt, and the operation of lithotomy was performed. The calculus extracted resembles a petrified lumbricus. The nucleus was the cord introduced, as above mentioned.

Monstrosity. Anterior Parietes of the Abdomen Deficient—Peculiar Form of Spina Bifida.—The specimen was sent to the Society by Dr. R. M. HODGES, and exhibited by Dr. JACKSON. Labour occurred at the seventh month; the woman (Irish) having previously had a large family of children. Pains came on about noon, and she set out to walk a distance of between one and two miles to obtain a permit of entry into the Alms-house. On her way she felt something coming from the vagina, and this subsequently proved to be the intestine of the foetus. Her case being urgent, she was sent to the Cholera Hospital, as being nearer than the alms-house, and there Dr. H. saw her at half-past three P. M. On examination, the intestines, liver, and the two elbows were found to present; the lower extremities, as it appeared afterwards, being bent entirely backwards; a hand was soon forced down, after which there came one pain and the foetus was expelled, doubled up in a most remarkable and altogether reversed position. This was at 4 P. M. The child was quite fresh, though stillborn.

The anterior parietes of the abdomen are entirely wanting. The liver is a very prominent object, and somewhat irregularly developed; gall-bladder and ducts traced. Spleen of usual size. A considerable portion of the stomach and intestine had been torn away before Dr. H. saw the woman. The rectum opens freely upon the serous surface, but near to the line of the integument. The urinary bladder consists of two cavities, sufficiently and about equally developed; these communicating freely towards what would be the neck, and the one from which the remains of the urachus arises, communicates almost throughout with the rectum. The right kidney was very prominent, and in the condition of hydronephrosis, being as large or larger than the stomach of the foetus would have been if distended; presented the usual appearances upon the cut and upon the inner surfaces of a distended kidney, and was filled with fluid. The ureter was much enlarged, and towards the bladder ended in a cul-de-sac. Left kidney sufficiently normal; ureter accidentally cut off. Renal capsules normal. Upon each side of the

opening from the rectum, and at some little distance from it, though still upon the serous surface, was another opening of an oval form, and sufficiently large to admit a small director. The symmetry of these two openings, in regard to position, size, and form, was striking; and on passing in a probe, it was found to play about freely as in a large cavity. One of these cavities was then cut open, and was found to be a pretty well developed vagina. From this last there arose a uterus, having its os tincæ and arbor vitæ well marked, and sending off from its fundus, and towards the right side, a distinct Fallopian tube. The vagina and uterus upon the left side were not cut open, but externally the appearances upon the two sides corresponded precisely. There was upon each side, then, one-half of a uterus, with its tube, and one-half of a vagina, each being nearly or quite as largely developed as the entire organ is in a well-formed fœtus; the two uteri being quite prominent objects, situated far apart, near the margin of the integument, and directed upwards and outwards. The ovaries were not found. A trace of the external labia was seen on each side, and just where the integument ceased. The two pubic bones, as they may be called, were separated, as usual in cases of extroversion of the bladder, and to the extent of nearly or quite one and a half inches. The umbilical cord was inserted, as usual, upon the margin of the integument. Thoracic organs sufficiently well.

Spina bifida also existed. A sac, nearly or quite the size of two fists, hung off from the region of the sacrum, consisting of integument, lined by a serous membrane, and containing, by estimate, ten or twelve ounces of serum; opening from the spinal canal, prominently seen, as soon as the sac was laid open. Dr. J. remarked upon this form of spina bifida as having been observed here in some few other cases, and he thought it had not generally been described. The peculiarities in this case are in the situation over the sacrum, and in the extension over the tumour of a well-developed cutis; whereas in ordinary spina bifida the malformation is higher up, and the integument is deficient to the extent of the malformation. The large size, and the thinness of the sac, with the large collection of fluid, are also observed in the present variety; though in two cases, on the contrary, that have been observed here, the tumour resembled a female breast over the lower part of the child's back, and in one of them, which was dissected, the cavity within was quite small, and there was a large quantity of fat between it and the skin. The fœtus was otherwise well formed externally.

Varicose Arterial Tumour.—Dr. H. J. BIGELOW presented the specimen, a tumour upon the forehead of a middle-aged female. It was of the size of a large hen's-egg, directly over the right eye, projecting upon the forehead, and dipping beneath the orbit; convoluted in its surface; of a brilliant red, pulsating heavily, and filling to its utmost capacity in about three seconds after the blood had been pressed out of it as from a sponge. It was painless, of about two years' duration, gradually increasing, and originally near the hair, from which situation it seemed to have gravitated to its present position. Numerous dilated arteries radiated from its circumference. At the operation, the larger trunks were secured by ligature, but the tumour continued to fill with blood until nearly the whole periphery had been included in successive ligatures. With a view to its radical extirpation, it was then rapidly excised within the ligatures, when the exposed surface bled obstinately, even after the use of the actual cautery. The wound rapidly healed. A wax injection of the tumour was shown, from which the skin had been dissected. In form, it resembled a solid bundle of common earthworms. The convoluted arteries

suddenly expanding and contracting, mutually to inosculate, were inextricably interwoven.

Dr. B. remarked, that a thesis, with plates, had been long ago written upon this rare disease by Breschet. He had himself seen it in two cases in the hand. In the case of a young girl, described by Dr. Townsend, an affected finger had been since amputated, and some of the dilated trunks in the hand and arm tied with great relief. In the other, the case of an old woman, one finger had been converted into a flexible, pulsating mass, the bones having undergone almost complete absorption.

July 24. Membranous Croup in the Infant—Cases, &c.—Dr. COTTING, Associate Member of the Society, showed the trachea of a child who died of *croup* at the age of fifteen months, and gave the following account of the case: Patient was taken on Tuesday P. M., July 18; passed a restless, uncomfortable night. The difficulty of breathing was the chief symptom, but was attributed to a “stuffed cold.” During the next day, the breathing, though difficult, was not so distressing as the night previous. At dark, on Wednesday, the labour of respiration was so great that the parents became alarmed, and sought medical advice. They had not considered it *croup*, although they had had previous experience in the disease. Two years before, an older child (five years) had a severe attack, and, after five days of constant inhalation of steam, threw off the membrane and recovered. According to Dr. C.’s experience, very few cases of membranous *croup* are suspected to be *croup*, or to be of much moment, until the physician gives the startling announcement. Other forms of *croup*, so called, but misnamed, and of very little danger, generally from the onset cause great alarm.

The patient from whom the specimen was taken, died on Thursday, 20th, after an illness of about thirty-six hours. The croupy exudation covered the under side of the epiglottis, was more consistent over the glottis, and formed a complete membrane, which could be readily raised for about five lines below the chordæ vocales. The inner surface of the remainder of the trachea was of a bright red colour, diminishing in intensity from above downwards, but extending, quite visibly, below the bifurcation, and into many of the branches. There was some slight congestion of portions of the left lung, near the smaller bronchi. No other morbid changes noticeable.

The case is interesting on account of the youth of the patient. Some years since Dr. C. performed the operation of tracheotomy on a patient of less than seventeen months. The operation was performed on the following grounds, viz: the child’s danger would not be increased; the parent strongly urged it, having in some way heard that it might afford an additional chance of relief; and lastly and chiefly, that if, as believed, the membrane, or exudation, progressing from above downwards is less liable to descend far, in inverse proportion to the age of the child, an opening made into the trachea low down would possibly go below the membrane, and offer a greater chance of success. The operation was unsuccessful. No *post-mortem* was allowed.

On relating this case to one of great experience in this disease, a doubt was thrown over the diagnosis on account of the youth of the patient, and on that account only. Admitting that no case can be proved to be membranous *croup* unless the membrane can be produced before or after death, and a *post mortem* in this case having been denied, there was no alternative but to wait till time and chance gave further opportunities of testing the question.

Two cases of recovery in children under one year, and one in a child of twenty months, have occurred to Dr. C. since the time alluded to. In these,

sufficient fragments of membrane were thrown off to prove the disease. In a family where one child had some months previously died of croup, he was called to a child of five years, in the last stages. While this child lay dead in the house, another, of six and a half years, was taken. During the sickness of this child, some slight symptoms of the disease were supposed to be detected by the mother in a pair of nursing twins. On examination, the throats of both these infants appeared to be covered with the croupy exudation. They seemed to be well; nursed well; and it was only occasionally in their crying and slight cough that any suspicious sounds or symptoms could be detected. If the disease had not been so fearfully present in the house, it would never have been suspected in these children. Some fragments thrown from their throats could not be distinguished from those from the oldest child, or those taken from the deceased. The cases of these two infants had a decided influence on Dr. C.'s willingness to operate in the instance before spoken of.

The specimen presented to the Society, proves unequivocally that true membranous croup has occurred at the early age of fifteen months. It is undoubtedly more frequent in older children; but when the diagnostic symptoms are present, the young age of the patient must not be too much relied upon.

Uterine Polypus.—Dr. J. B. S. JACKSON gave the account of the case and specimen. The tumour is nearly the size of two fists, arises extensively from the cervix, and hangs into the vagina, which is much distended; form rounded; structure indistinctly fibrous, a free incision having been made through the mass; some appearance of vascularity upon the external surface, and at depending part. Where the neck of the tumour passes through the os tincæ, the two are intimately adherent, though the outline of this last is distinctly enough seen. At one point, however, there is an opening through from the vagina into the cavity of the uterus, about large enough for the passage of a small bougie. The uterus itself, through which a free incision has been made from the fundus into the neck, appears to be in every way perfectly healthy. The patient has been under the care of Dr. Samuel Gregg for about fifteen months, and from him the following history was obtained: Her age was 36 years. She had miscarried five times before carrying a child to the full term, and each time with considerable hemorrhage. In January, 1850, she had her second and last child at the full term, preceded by dangerous hemorrhage, as the placenta was over the mouth of the womb. From this last confinement she recovered well, but did not nurse her child. She was afterwards troubled with leucorrhœa. In about four months she began to have attacks of colic and gastralgia, and soon afterwards she was treated for hemorrhage, which continued more or less at intervals until her death. Since Dr. G.'s attendance, she has been perfectly blanched, and mostly confined to her bed. She, however, retained her flesh and appetite, and for a few months last autumn and winter, when the hemorrhage was slight, she gained strength and colour. The tumour was spoken of by the physician who was previously in attendance, only a month or two before Dr. G. saw her; enlarged considerably afterwards; examinations always caused more or less hemorrhage; and it was examined only once with the speculum, at which time it appeared very much as it did after death. It was never painful nor tender to the touch; caused no sense of bearing-down, nor dysuria, and scarcely gave any consciousness of its presence. The catamenia were regular, and entirely without pain, though sometimes attended by hemorrhage; the most severe hemor-

rhages, however, occurred generally a week or two after the flow had ceased, from which circumstance Dr. G. concluded that they proceeded from the tumour. A serious leucorrhœa existed most of the time during Dr. G.'s attendance.

August 14. Additional particulars of a Case formerly reported to the Society as "Ulceration of the Cæcum," (see this Journal for July, 1851, p. 65.)—Death of the Patient recently—Post-Mortem Examination—Correction of the Diagnosis.—Dr. STORER reported the following facts: In the summer of 1852, a year after the reference to her case to this Society, Miss L. was suddenly seized with severe pains in the back, where swellings in a few days appeared, followed by suppuration. In a short time an opening also appeared in the affected groin, through which pus was freely discharged. Her health became much impaired, and for a period her condition was extremely critical. During the year past, however, she has suffered much less, and has even remarked she "would almost have forgotten," to use her own words, "that she was not well." In April last, her feet began to swell, and about the last week in May, she became very feeble, and from that time has continued to fail. She died a few days since. Although no fecal matter has passed through the aperture in the groin, since the wound in March, 1851, air has continued to be thrown off at longer or shorter intervals, until her death.

The following *post-mortem* appearances, drawn up by Dr. CALVIN ELLIS, who kindly performed the autopsy, are very interesting, as well for the great malformations of the organs, as for the length of time the patient survived—for a portion of this time enjoying tolerable health.

A layer of fat nearly an inch in thickness in abdominal parietes.

The peritoneal cavity contained several ounces of serum. Much fat in the mesentery, meso-colon, and in those parts of the cellular tissue where it is usually found.

Several loops of the small intestine were firmly adherent to each other, to the parietes in the neighbourhood of Poupart's ligament, to the dense cellular tissue filling the pelvis, and to the sigmoid flexure of the colon.

Appendix cœci adherent to the lower half of right kidney, the cæcum lying below; both natural in their appearance. The last three or four inches of the small intestines were much contracted.

At a point about three feet from the pylorus, the small intestine was attached to the parietes, near the anterior superior spinous process of the ilium, and here a free communication existed between the carious surface of the bone and the intestinal canal, the opening in the latter being as large as a ten-cent piece; the mucous membrane immediately surrounding it was perfectly healthy.

The ilium in the neighbourhood of the superior and inferior spinous processes was in a porous, diseased state, breaking down easily under the probe, and was bathed in a dirty, very offensive pus. The exact limits of the disease could not be ascertained, but it communicated with the external openings in the groin.

Liver quite firmly, though rather loosely, attached to the diaphragm, and to some of the surrounding organs, by means of old, delicate, membranous bands. Its surface had a somewhat rough, cicatrized look. The cut surface presented the dark spots noticed in partial venous congestion.

Pelvic organs imbedded in a mass of dense cellular and adipose tissue. A phlebolite in vicinity of uterus.

Spine.—On making an incision over the lumbar vertebræ, the probe struck

what appeared to be denuded, but firm, bone. The muscles, however, were not discoloured as in diseases of the kind, and the opening immediately above this point (the fourth lumbar vertebra) communicated by a longitudinal canal with the diseased portion of the ilium.

Fracture of the Face, Clavicle, and Ribs.—Dr. COTTING, of Roxbury, reported the case. Dr. C. reminded the members that some years since, he related to the Society a case of recovery from a fracture of the entire face from the skull. (See this *Journal* for January, 1850, p. 71.)

A few days since, a boy, aged four and a quarter years, was run over by a carriage containing five persons. The soft parts of the face were lacerated on the right side, from the median line of the nose just above the cartilages, across the cheek to the lower edge of the zygomatic process of the malar bone, and from that point upwards to the outer angle of the orbit, completely denuding the bones of that side. The right superior maxillary bone, together with the malar, was completely broken from its attachments, and driven downwards and backwards for at least half an inch. The force of the blow appeared to have been received immediately below the orbit, a portion of the floor of which was separated from the maxillary bone.

Through the nose and the palate the separation took place at the median line; the nasal process standing off from its articulation, and the teeth and palate projecting into the mouth for the distance before mentioned. The zygomatic arch was broken down, and the articulations of the superior maxillary bone with the cranium, &c. severed.

The fractured portion was wedged in so firmly that, for some time, its reduction seemed almost impracticable. But after removing, with the saw and other instruments, many of the engaged fragments, it was successfully accomplished by the aid of a powerful trepanning lever.

The lower jaw, which was broken through the body on both sides and at the symphysis, was adjusted, and the fragments kept in place by tying the teeth together firmly with saddlers' silk.

The wounds were then closed with interrupted sutures, and cold-water dressings applied.

Over the left mammary process of the temporal bone there was a severe abrasion, where the head came in contact with the ground. The left clavicle was broken near its scapular extremity. There were also seven fractures of the ribs—the second, third, and fourth of the left side, anteriorly, near the junction with the cartilages, the fourth and fifth posteriorly; on the right side, the fourth, anteriorly and posteriorly. There was much effusion of blood into the neck and about the upper portion of the chest.

The boy was a patient of Dr. B. Mann, who rendered efficient assistance during the adjustment of the fractures.

Notwithstanding these severe injuries, the lad recovered his consciousness a few hours after the accident, and on the day following, sat up in bed, recognizing and speaking to some of his mates. His respiration, embarrassed from the first by the fractures of the ribs, grew more and more difficult. It was soon quite evident that his chief danger was from this source. Towards night of the second day he became more distressed. The respiration was partial, irregular, and painful. He remained conscious till about two or three hours before his death, which took place thirty hours after the injury.

The case is interesting in connection with the other, showing how great an injury the face and head may receive, without apparently involving the life of the sufferer.

[*Note*.—The Secretary takes this opportunity to correct an error in the report of the case of hydrophobia related by Dr. Cabot (*Extracts from the Records*, vol. ii. p. 47, *Am. Journ. Med. Sci.* April, 1854, p. 359). Dr. C. E. Ware is stated to have “inquired if there were any well-authenticated instances of recovery from the bite of a rabid animal?” Dr. Ware’s question was: if there were such instances of recovery from *declared and positive hydrophobia*.]

ART. VII.—*Case of Paraplegia, caused by Concussion of the Spine. With Remarks.* By CHARLES A. LEE, M. D.

ACCIDENTS to the spinal cord may be considered, in the light of physiological experiments, throwing much light on its office and functions. Many such have been recorded. The case I am about to detail, has sufficient points of interest, perhaps, to render it worthy of permanent record.

In the spring of 1853, I was called to see Mr. Pope, of South Sodus, N. Y., a patient of Dr. Lewis Graves, from whom I learned the following particulars: Age 57, habits intemperate, health not very good for a short time previous to the injury. On the 28th of August, 1848, he fell from his wagon, striking his head and shoulders on the ground, the whole weight coming upon his head, which was thrown backward and under the body. On raising him up, he was found to be helpless, but wholly conscious. Dr. Graves found him, two hours afterwards, sitting upon the floor, a friend supporting him in an erect position. The arms and lower extremities were found wholly paralyzed, sensation and motion entirely destroyed; the knees were inclined to fall together, and were not easily separated; the hands were flexed upon the wrist; the thumbs and fingers turned in upon the palms of the hands; though he was unable to raise his hands to his head, he had some power to raise the arm and shoulders. On examination, there was found to be a partial dislocation of the sixth cervical vertebra, it being thrown partly to the left of the spinal column. The patient complained of tenderness on pressing over the parts injured. The urine had to be drawn off by a catheter for several days, after which the urine and feces passed involuntarily, though he was conscious when it was about to happen. The quantity of urine secreted was about the same as in health. The bowels were kept open for several weeks by catheters. The pulse was about fifty in a minute, and quite feeble; appetite generally good, and the food digested well for about four years. Since that time, the appetite has been poor, and digestion considerably impaired. Vomiting would often come on soon after eating; the feet and legs became anasarcaous, and abdominal dropsy was also present. This condition existed for several years. There was sloughing of the cellular tissue of the nates and posterior part of the thighs, caused by pressure from sitting on a hard chair. About six months after the injury, he fell into the hands of a Thomsonian, and was treated by lobelia, emetics, and cathartics, during which, inflammation of the scrotum and penis took place, resulting in extensive sloughing of the parts. Dr. Graves, on being again called in, administered stimulants and tonics, under the influence of which the recuperative powers again rallied, and in the course